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DOCUMENTS
OF THE
CITY OF BOSTON,
FOR THE YEAR 1914.
IN FOUR VOLUMES.

VOLUME II.

CONTAINING DOCUMENTS FROM NO. 16 TO NO. 31, INCLUSIVE.

Published by Order of the City Council.



CITY OF BOSTON
PRINTING DEPARTMENT
1915

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CONTAINING CITY DOCUMENTS FROM NO. 16 TO NO. 31, INCLUSIVE.

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SEVENTEENTH ANNUAL REPORT
OF THE
BOSTON INFIRMARY DEPARTMENT
FOR THE YEAR ENDING JANUARY 31, 1914.

28 COURT SQUARE,
BOSTON, MASS., January 31, 1914.

To His Honor the Mayor of the City of Boston:

SIR,—In accordance with chapter 3, section 24, of the Revised Ordinances, the Boston Infirmary Trustees herewith respectfully submit their report for the year ending January 31, 1914.

During the year resignations have been received from three members of the Board. Edward M. Gallagher, who had served as chairman for six years, resigned in April; Mr. James A. Dorsey, who succeeded him as chairman, resigned in September, and Dr. Nathaniel W. Emerson in October. The vacancies on the Board have been filled by the following appointments: Mrs. Agnes C. Bulger, to succeed Mrs. Alexander (whose term expired in 1910); Mr. Thomas E. Masterson, to succeed Mr. Gallagher; Mr. Joseph I. Stewart, to succeed Mr. Dorsey, and Mr. Frank L. Brier, to succeed Dr. Emerson.

On May 7 the Board organized by the election of Mr. James A. Dorsey, chairman, and Miss Mary A. Dierkes, secretary. Since the resignation of Mr. Dorsey, Mr. Thomas A. McQuade has served as chairman *pro tempore*.

There have been few changes in the visiting medical staff. Resignations have been received from Dr. Gerald

Blake, assistant visiting physician, and Dr. F. M. Spalding, visiting ophthalmologist. Dr. William H. Robbins and Dr. Malcolm Seymour have been appointed visiting physicians.

The department expenditures for the year amounted to \$217,963.36, causing a deficit of \$21,463.36, as the appropriation for the year was but \$196,500.

On the office expense account there was a slight deficit of \$58.12, due entirely to the payment of expenses incidental to the sale of the Charlestown Almshouse, amounting to \$1,131.11. Appropriation, \$5,500. Expenditures, \$5,558.12.

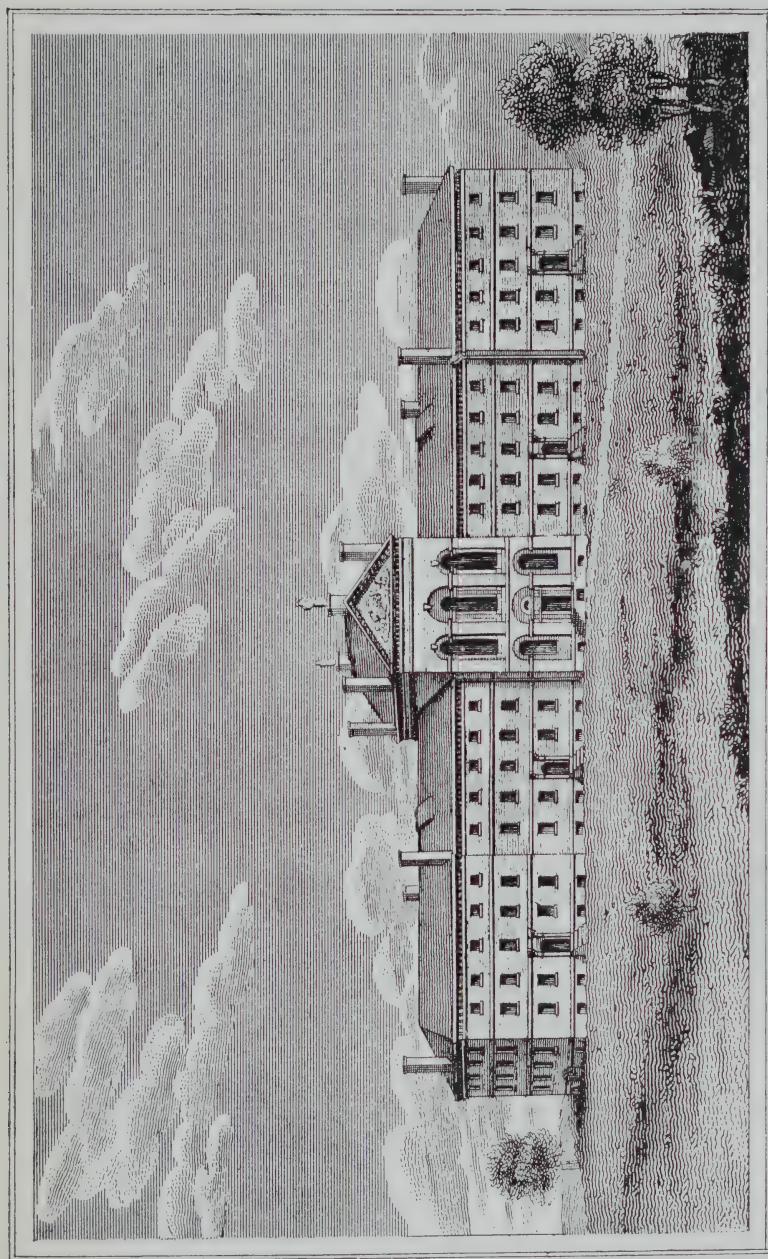
The Charlestown Almshouse account, with an expenditure of \$15,913.31, shows a deficit of \$413.31. Although it was estimated at the beginning of the year that \$16,000 would be necessary for this institution, an effort has been made to keep the expenditures within the appropriation allowed, \$15,500. Anticipating the removal of the household to Long Island, only absolutely essential purchases have been made for the past two years, but it has been found impracticable to maintain the institution with an appropriation of less than \$16,000.

The steamer "George A. Hibbard" expended \$2,083.75 in excess of the appropriation of \$9,000. Fuel has cost \$1,300 and repairs \$900 more than was estimated at the beginning of the year. The boat has consumed nearly three hundred tons more coal than during the previous year, and the average price per ton has been \$3.90 against \$3.53 last year, an increase of 37 cents per ton.

On the pauper expense account there was a sufficient balance to cover the deficit on the above appropriations and provide something toward the larger deficit on the Long Island Hospital appropriation.

The Long Island Hospital appropriation of \$160,500 was exceeded by \$22,186.10, the expenditures amounting to \$182,686.10. This is an increase of \$12,521.91, or 7 per cent, over the expenditures of the previous year. The average actual population (excluding those on leave of absence) was 909, an increase of sixteen, or about 2 per cent, over the previous year. This is the highest average population ever known at the institution. The weekly per capita expenditure of \$3.85 is 21 cents, or nearly 6 per cent, higher this year than last.

It will be noted that the income for the Long Island Hospital, \$19,567.57, is unusually large. This is on account of the subsidy of \$5 per week paid for consumptive patients by the Commonwealth of Massa-



Engraved according to a sketch by J. F. Brown

Almshouse, 1825.

ALMS-HOUSE, LEVERETT STREET.

THE THIRD ALMSHOUSE OF THE CITY OF BOSTON, ERECTED ON LEVERETT STREET IN 1800 (OPPOSITE THE PRESENT SPRING AND BARTON STREETS), REMOVED IN 1825.

chusetts, under chapter 597 of the Acts of 1911. This sum really covers payments from this source for two years, 1913-14 about \$6,000, and 1914-15, \$9,000, the latter sum, which would naturally be paid in March, 1914, having been paid during the month of January. This fact accounts for the decrease of 8 cents in the net weekly per capita cost at Long Island, which is \$3.44 this year against \$3.52 last. These figures should not therefore be compared as this year is the first year that state subsidy for consumptives has been received.

On June 26 the graduation exercises of the Training School for Nurses were held at Long Island and fifteen nurses were awarded the diploma of the hospital.

Early in September Miss Margaret J. Chisholm, who for six years has held the position of superintendent of nurses, resigned and the work of the training school was carried on temporarily by Miss Ellen H. Marshall. On January 1 Miss Mary A. Meyers was appointed superintendent of nurses.

The trustees are pleased to note the excellent work accomplished by the training school and would be glad to render all possible assistance in the way of boat service for the visiting staff in order that more frequent lectures may be given and the school developed to the highest possible degree of efficiency.

Diplomas have been awarded also to the following house officers: Lionel L. Albert, M. D., Philip Mysel, M. D., Richard D. Heap, M. D., David H. Shulman, M. D., and Benjamin Friedman, M. D.

In addition to the \$77,000 appropriated last year for the new buildings at Long Island, \$210,000 has been appropriated during the present year, making a total of \$287,000. The construction of a new central kitchen with connecting subways to the different buildings, an addition to the men's dormitory and the alteration of the men's dormitory have been undertaken, following the general plan outlined in the report of a year ago. The addition to the men's building and the kitchen are nearing completion and the remodeling of the old building will be commenced as soon as it is possible to care for the inmates in the addition.

While this will give considerable relief to the crowded condition of the hospital, further construction should be undertaken immediately. The lack of sufficient number of nurses to adequately care for the present hospital population makes the need for a new and larger nurses' home an absolute necessity, as present

accommodations will not permit of an increase in the number. Another crying need is a maternity hospital and nursery separate from the main hospital, and to this use it is planned to put the present nurses' home. The plans already adopted call for a nurses' home and for hospital and dormitory pavilions and the architects estimated that these buildings could all be erected within the appropriation above mentioned. This proved impossible when bids were procured and it was decided to postpone the erection of the nurses' home, also the hospital and dormitory pavilions, until further funds were available. The system of heating provided in the original plans proved entirely inadequate. A careful study of the heating problem was made by experts employed by the trustees, upon whose recommendation a vacuum system of heating has been adopted, and it is anticipated that this system of heating will make possible a considerable saving in the cost of fuel.

It is hoped that a further saving in fuel can be made by the installation of weather strips in the women's dormitory and the main hospital building.

It is with deep sense of loss that we record the death on April 6 of Miss Mary A. McGinley, who for eleven years gave to the City of Boston loyal and conscientious service. Her untiring devotion to her work, in which she showed ability and judgment, her loving sympathy for those unfortunates with whom she came in contact and her bright and cheerful presence will be long remembered by those who knew her.

In the resignation of Dr. James S. Tomkies, resident physician of the Long Island Hospital, which takes effect within the next few days, the department loses a most valuable and competent officer, whose excellent work at Long Island for the past three years has been much appreciated. His successor is to be Dr. Cyril G. Richards, who will take charge of the hospital on March 1 next.

Respectfully,

THOMAS A. MCQUADE, *Chairman pro tem.*

MARY A. DIERKES, *Secretary.*

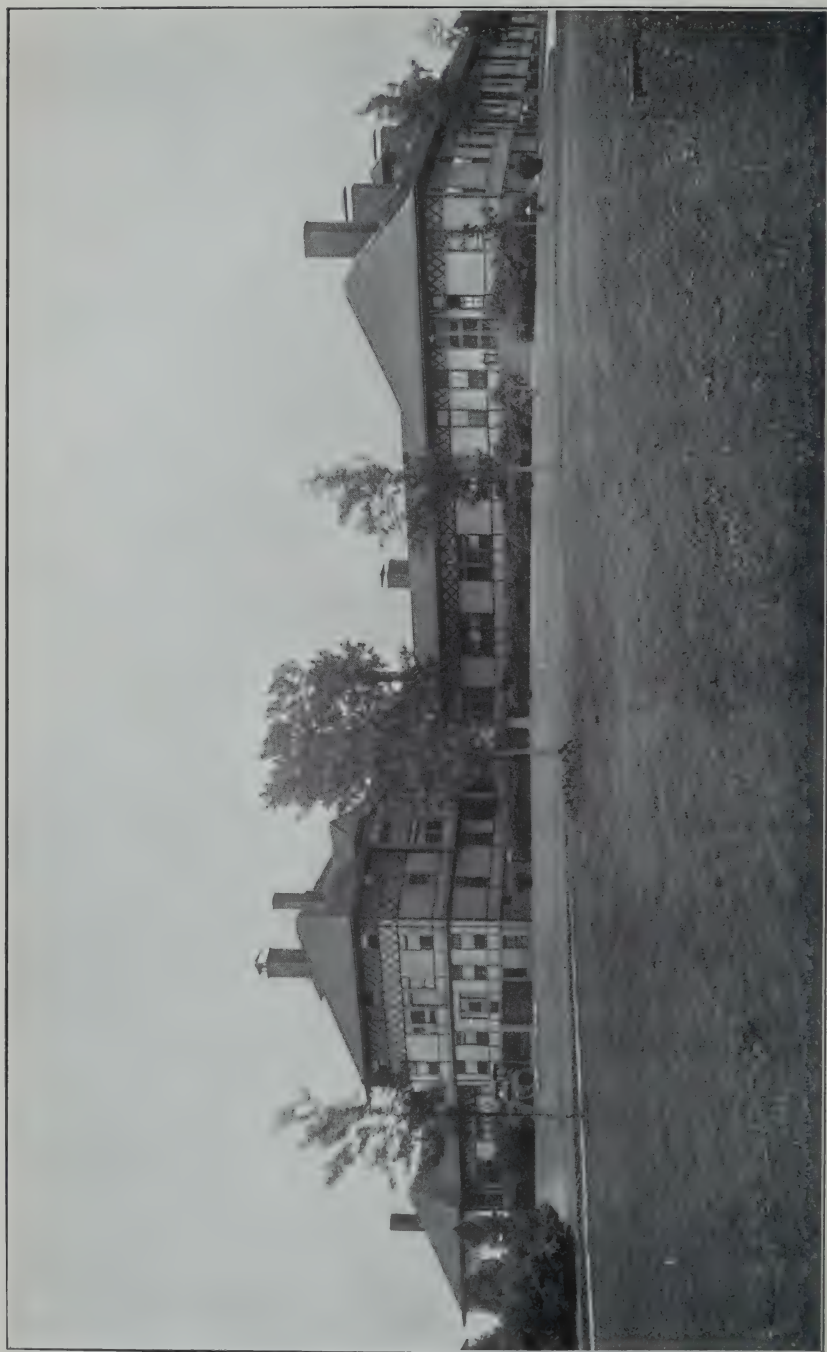
ARTHUR BERENSON.

AGNES C. BULGER.

THOMAS E. MASTERSON.

JOSEPH I. STEWART.

FRANK L. BRIER.



ADMINISTRATION BUILDING AND MAIN HOSPITAL.

REPORT OF THE SUPERINTENDENT OF THE
LONG ISLAND HOSPITAL.

LONG ISLAND, BOSTON HARBOR, January 31, 1914.*To the Boston Infirmary Trustees:*

I have the honor to present the following as the annual report for the year now ending.

The appended statistics will indicate the exact increase in population, but, baldly put, we have actually been running 2 per cent above our former or any previous maximum.

The back wharf, so called, is in such a condition that it must be rebuilt or materially repaired without delay. The condition with regard to this particular physical detail of the equipment of the island constitutes an absolute exigency and imperatively calls for immediate remedy.

The new buildings on the island are in process of construction and there is nothing to be remarked with regard to the subject except that it is of the most paramount importance that a new nurses' home should be erected and the present old structure converted into what is a vitally necessary maternity hospital.

An idea that has insistently impressed itself upon my mind, and one which should be of dominant interest, is the enlargement and careful development of the Training School for Nurses. This department, within its unfortunately limited resources and scope, has produced results which have been most satisfactory but which are still far from complete and far from what it is possible easy to make them.

In passing it may be well emphatically to repeat that in our two years' course at the hospital we are able to equip our nurses to thoroughly and perfectly follow their profession except perhaps that time may be lost to them in the course of their instruction in their lectures from the visiting medical staff because of the existing uncertainties of transportation.

The inmates and the buildings on the island at the present time are exposed to hopeless and unnecessary loss through lack of proper means of announcing a fire

danger. Thermostats should be installed generally, at whatever ephemeral expense, to obviate this grave danger and loss.

With the vast number handled annually, it is almost amazing that there are not more to be found discontented and, reviewing a personal experience covering more than a decade in handling this class, I am struck with the incontrovertible fact that only a fraction of 1 per cent ever show a spirit of unrest, and that the small fraction of the unsatisfied come from those who are chronic if not deliberate indigents and who have never previously enjoyed in their individual sphere any of the comforts approaching those extended them in our institution.

And in this respect it may be well to remark at this point that much of our overcrowding is occasioned by admitting to the institution many who are unworthy but who at the time of their admission are in no condition to be barred, the class that the well meaning amateur and the professional posing philanthropist protest against admitting and yet neither suggest nor provide any means for their necessary care.

Another point which acutely hits at the economics of the institution is the care of those suffering from tuberculosis. I strongly urge that when it be established that the disease in a patient of this type is found to be active and therefore contagious, provisions be made for his or her removal to some other institution and the space vacated by them devoted to others absolutely needy.

A word as to the most dreadful and problematical plague that confronts us — vaginitis. This terrible disease so prevalent in all classes, but for which we have particularly to care, as I have suggested in a previous report, from all points of economy and mercy we should see to it that the first step to check or cure it should be taken, and that is to provide means of drastic isolation.

To my mind the duty of the head of a department such as this is to think, and do some broad, deep thing. I may say that there is a broadspread idea that pauperism is caused by the excessive use of alcohol. A practical word in answer to the fanatical theorist is that the idea of the sociologist that alcoholism is a disease is absolutely without foundation; scientific and medical experience and history demonstrate that it is not, and never has been, anything more than a symptom of a disease.

PERSPECTIVE SHOWING PRESENT BUILDINGS AND PROPOSED NEW CONSTRUCTION AT LONG ISLAND.



NURSES' HOME.

CHAPEL

WOMEN'S DORMITORY.

BOILER HOUSE.
MAIN HOSPITAL. KITCHEN.

ADMINISTRATION BUILDING AND MEN'S DORMITORY.

PRESENT NURSES' HOME.
CONSUMPTIVES' HOSPITAL.
HOSPITAL PAVILIONS

DORMITORY PAVILIONS

WELLS & DANA, ARCHITECTS.

There has been a discussion for years whether this island or any island should be the site for a hospital of this character; and the answer is that an island not so far removed from the mainland would be the ideal location. If it might be that we could have institutions upon an island within a few minutes' run of the city proper it would be most desirable, but confronted as we are with economic conditions and institutions existing, a system so near completed and so easily made nearly perfect, the question is dismissed.

Upon the matter of departmental appropriation, as I have declared in all previous reports, I believe in a rigid economy, but in no stint for the moment that will be felt to-morrow and which renders incomplete service for the day. I present my estimates prepared to live within them, and allowing for no discounts if the institutions are properly to go forward and upward.

The resignation of the resident physician, Dr. James Scott Tomkies, is a conspicuous loss to the hospital. Dr. Tomkies, with a rare skill in medicine and surgery, united a disposition of pleasing helpfulness to the patients and an absolutely untiring devotion to his work.

During the year the hospital has had the advantage of a visit from Dr. E. J. Curran of the University of Kansas, who, as an ophthalmologist, enjoys an international distinction. His tour, investigations here and experiments were of incalculable value to us and the city owes him the fullest measure of appreciation.

Respectfully,

CHARLES E. DONLAN, M. D.,
Superintendent.

REPORT OF THE SUPERINTENDENT OF THE ALMSHOUSE, CHARLESTOWN.

CHARLESTOWN ALMSHOUSE, January 31, 1914.

To the Boston Infirmary Trustees:

I have the honor to submit to you the annual report of the Charlestown Almshouse for the year ending January 31, 1914.

The average population at this institution has been ninety-four. Practically all of our admissions have been men, and we feel this a handicap, inasmuch as women are needed for housework.

The health of the inmates has been very good, there having been but four deaths, two men and two women, all of advanced age. Ten inmates were transferred to Long Island for special hospital care, and three to institutions for the treatment of mental disease.

Anticipating the removal of the institution to Long Island there have been few repairs made to the buildings. However, we were obliged to have the roof patched on the main building, and it was necessary also to repair the hot water heater and to make many minor repairs. We have been renewing our supplies only to meet immediate needs in anticipation of removal, and these, too, will need some replenishing.

The farm has been productive, and both the officers' and inmates' tables have had an abundant supply of fresh vegetables.

During the past year our old people have been most fortunate in the matter of entertainments. Many friends from churches and other organizations have furnished amusement.

The spiritual welfare of our charges has been most zealously attended to by both our Catholic and Protestant clergy. The priests from St. Francis de Sales Church have made monthly visits to hear confessions and administer Holy Communion to those inmates who are physically unable to attend church. Every Sunday services are held by the different Protestant clergy and prove a source of great comfort and consolation to the inmates.



CHARLESTOWN ALMSHOUSE; ERECTED IN 1849; BECAME PROPERTY OF THE CITY OF BOSTON IN 1874, WHEN CHARLESTOWN WAS ANNEXED TO BOSTON.



The efficiency and high standard of the institution have been maintained through the unfailing effort and good will of the officers, to whom I am most grateful for their cooperation.

The interest of the trustees in the work of the institution, and their advice, always cheerfully given, together with the assistance rendered by the Boston office force, have been very helpful to me in my administration, and I wish to express to them my deep personal gratitude.

Respectfully submitted,

MARY A. MORRIS,
Superintendent.

REPORT OF THE VISITING MEDICAL STAFF OF THE LONG ISLAND HOSPITAL.

BOSTON, January 31, 1914.

To the Boston Infirmary Trustees:

Since the writing of our last report, additions to the hospital buildings, which were then in contemplation, have been begun, and when completed, the added facilities long needed will unquestionably result in more adequate service. As in all public institutions, the tendency at Long Island has been for the demand to outstrip the supply, with the result that for many years there has been overcrowding with consequent disadvantage to the patients. This will no doubt at least temporarily be rectified when the new buildings are in operation, and the hospital, now with a long and creditable past, may be expected to accomplish still more definite results in the future. With the natural growth of the city and the increasing tendency on the part of the people to seek hospital treatment, the institution will doubtless need further additions in the future, but the experience gained by the building at present going on will serve to render future problems less difficult of solution than the present expansion has been.

In our last report we mentioned the possible establishment of a social service department in immediate connection with the hospital. This we still think is desirable, and it is to be hoped with the general expansion of this type of work that the Long Island Hospital may finally be included in its ministrations.

We are glad to record a possible extension of the usefulness of the hospital through the appointment of a special student, Dr. George Smillie, to the temporary position of resident biological chemist. Dr. Smillie, through previous hospital experience, is well trained for the special chemical work which he proposes to undertake in conjunction with Dr. Malcolm Seymour of the visiting staff. Your Board has generously acceded to the request that this appointment be made, and hereby we trust a precedent has been established which will permit the more extended use of the unusual oppor-

tunities offered at Long Island for special study and research. In the investigation of chronic disease the hospital offers facilities superior to those of any other institution in the city, and it is a matter of congratulation that these facilities should be used and that men should be found who have the capacity to avail themselves of them. It should also not be forgotten that original research is of the utmost value to the hospital and should at all times be encouraged, both for the benefit of the institution itself and for the broader influence it thereby will come to exert in the community at large. Such work also if successfully accomplished will tend to make the position of house officer attractive and induce men of capacity to apply for places, thereby leading to the direct benefit of the patients.

An event of importance to the institution is the resignation of Dr. J. S. Tomkies, who for many years has served its interests with great devotion. Dr. Tomkies leaves for another sphere of work with the best wishes of all with whom he has been associated at this hospital. He has shown himself a man of judgment, tact and capacity to meet the exigencies of a difficult position with skill and enthusiasm. It is not to be questioned that his future work will show the effect of the training he has had at Long Island and that it will also reflect credit upon the institution he is about to leave. We extend to his successor, Dr. Cyril G. Richards, the assurance of our assistance in meeting the problems which have been so conscientiously met by Dr. Tomkies.

It is again our pleasant duty to express our appreciation for the privileges afforded the staff by your Board and of the active interest taken in all matters of medical interest by the superintendent, Dr. Charles E. Donlan.

Respectfully submitted,

E. W. TAYLOR, *Secretary,*
For the Visiting Medical Staff.

REPORT OF THE VISITING PHYSICIAN OF THE
ALMSHOUSE, CHARLESTOWN.

CHARLESTOWN, MASS., January 31, 1914.

MISS MARY A. MORRIS,

*Superintendent Charlestown Almshouse, Charlestown,
Mass.:*

We have had about the same amount of sickness during the past year. We have succeeded in helping the inmates in almost all cases. We had to commit three inmates for mental disease.

Ten inmates were transferred to Long Island for special hospital care.

Four inmates died during the year, two men and two women. One woman died of cerebral hemorrhage, aged sixty-eight, the other died of fatty degeneration of the heart, aged fifty-five. Both men died of arteriosclerosis, involving the heart, ages eighty-one and seventy-five.

I am again thankful to my assistants for their very faithful service.

Very respectfully submitted,

JOSEPH E. McDERMOTT, M. D.



NURSES' HOME.

LONG ISLAND HOSPITAL TRAINING SCHOOL FOR NURSES.

This training school is established to give a systematic course of training and practice to women in the care of patients, and to fit them as trained nurses for any class of cases.

The school is connected with the Long Island Hospital, which is located on one of the most beautiful and salubrious islands of Boston Harbor. The hospital building is new and modern in all its appointments and contains over three hundred beds.

The superintendent of the hospital has the general supervision of all matters relating to the school. The superintendent of nurses has the immediate charge of all the nursing in the hospital, of all persons employed in the wards, and also the instruction and management of the pupils in the training school.

The course requires two years, and includes medical, surgical, maternity and infant nursing.

Instruction is given by means of lectures, demonstrations, recitations on the same and from text-books, and teaching at the bedside in the regular performance of duties. Regular courses of lectures are given by the house physicians and members of the medical staff.

Weekly classes in the principles of nursing are conducted by the superintendent of nurses.

Preliminary course extends during two months of probation, and includes hygiene of hospital wards, nursing ethics, points in practical nursing, beds and bed making, baths, carrying of trays and feeding of helpless patients, giving of medicines, of enemata, and use of female catheter; preparation and giving of hypodermic injections, prevention and care of bed sores, care of convalescent patients; management of ward supplies, care of hot water bottles and ice caps; taking of pulse, respirations and temperatures; keeping of clinical charts; attendance with junior class at lectures and autopsies as they come in order.

Junior Year.—Subjects covered: Anatomy and physiology, bacteriology, materia medica, treatment in diseases, medical and surgical dressing, urine analysis, microscopic examination of sputum and excreta, demonstration in practical nursing and bandaging; observation in lying-in room, operating room and X-ray room; care of infectious cases, giving medical treatments, surgical dressings, making of surgical and obstetrical supplies; nursing care of infants and children; night duty; preparation and care of the dead.

Senior Year.—In weekly classes the subjects followed are obstetrics, gynæcology, surgical and operating room technique, orthopedic nursing, administration of anæsthetics, radiology and electrotherapeutics; diseases and treatments of the eye, ear, nose and throat; diseases of the skin, complications and management in diseases of the kidneys and urinary system, the heart and circulatory system; insanity and nervous diseases; nursing care of feeble-minded children; treatment of diseases of the respiratory organs; preventive, curative measures, and general management of tuberculosis; nursing care of chronic and incurable patients; service in operating room and lying-in room, infant feeding and preparation of milk formulæ.

Senior nurses assume responsibility of the management of the wards in the absence of the head nurse in charge, admitting patients into the wards, discharging of the same, listing and care of patients' clothing, charting, keeping of nurses' records, giving treatments and fulfillment of doctor's orders; serving of special diets to patients.

An extended course is given in dietetics and invalid cooking, covering lectures and practical demonstrations on the chemical composition of foods, food values, sources and classifications; uses and preparations of foods and beverages, with methods of serving the same.

Course in massage, where by means of lectures and practical demonstrations and manipulations the details of such treatments are taught and the art of applying judiciously and according to physiological laws the various passive and resistive movements.

Candidates will be received between the ages of twenty and thirty years (married women are not desired). They must be of sound health and have teeth in good condition. They should send a brief personal history and give the names and addresses of responsible persons,

not of their own kin, who know their good character and capabilities. If their recommendations are satisfactory to the superintendent, they will be received for two months on probation.

A personal interview is required of all candidates desiring to enter the training school. For this purpose, "passes" for the steamer "Monitor" will be furnished upon application to the superintendent of nurses, who arranges to see candidates on Saturday afternoons.

At the end of the second month, candidates, if considered satisfactory to the authorities in charge of the hospital, are permitted to join the school upon signing an agreement to complete the prescribed course of two years and to conform to all rules.

The right is reserved by the authorities of the hospital to terminate, at any time, the connection of any pupil for inefficiency, misconduct, generally unsatisfactory record, or for any other reason which may be deemed sufficient.

While the education and training which are afforded are intended to be a full equivalent for their services, there is given the pupils, toward defraying their necessary personal expenses, \$10 per month during the first year and \$12 per month for the second year.

If pupils successfully fulfill the requirements for the full term of two years and pass the necessary examinations, they will, upon the termination of their service, receive a diploma from the hospital.

There are no fixed dates for the beginning of service; accepted candidates may enter whenever vacancies occur, but are usually received in order of application and acceptance.

Pupils are not permitted during their training to leave the training school to nurse sick relatives or friends.

Pupils are required to wear the training school uniform after they join the school.

Hours of duty for day nurses are from 7 a. m. to 8 p. m.; for night nurses from 8 p. m. to 7. a. m. Each nurse on day duty is allowed two hours for rest and recitations, four hours on Sundays and holidays, and a fortnightly twenty-four hour leave of absence. Nurses on night duty are required to be in bed until 4 p. m. Nurses will be called on for two or more months' regular night duty during each year's training.

TRAINING SCHOOL FOR NURSE ATTENDANTS — ONE-YEAR COURSE.

LIST OF GRADUATES.

(Arranged According to Year and Sequence in Graduation.)

1896.

Miss Emily Bradford.	Miss Arsilla M. Lisson.
Miss Mary Carmen.	Miss Mary McManus.
Mrs. Addie G. Flood.	Mrs. Bridget T. Salmon.
Miss Mary MacAdam.	Miss Elizabeth H. Sullivan.
Miss Alice G. Proctor.	Miss Mabel Sadlier.
Miss Lena Boutellier.	* Miss Rachel M. Watson.
* Miss H. Pearl Hyde.	

1897.

* Miss Edith M. Rose.	Miss Florence McDonald.
* Miss Daisy M. Story.	Mrs. Georgie Lynch.
* Miss V. Merle Bacon.	Miss Clara A. Reed.
Miss Betsie F. Leonard.	* Miss Erminie Mercier.
Miss Catherine McDonald.	

1898.

There were no graduates, as the course was extended from one year to two. Future graduates will take the course of two years.

TRAINING SCHOOL FOR NURSES — TWO-YEAR COURSE.

LIST OF GRADUATES.

(Arranged According to Year and Sequence in Graduation, with Data Showing Present Whereabouts.)

1899.

Miss Katherine B. MacAdam, nurse, New Bedford Almshouse.
 Miss Margaret A. Kelley, nurse, Instructive District Nursing Association, Boston.
 Miss Winifred Dillon, dead.
 Miss Mary B. A. Wells, not nursing.
 Miss Mary E. Fenton, private nurse, New York City.
 Mrs. Ellen Dwyer, school nurse, Boston.
 Miss Delia J. Riley, Sister of Charity, New York.
 Miss Sara E. MacGowan, dead.
 Miss Myretta E. Waite.
 Miss Julia Kelleher, nurse, Soldiers' Home, Chelsea.
 Miss Margaret J. Chisholm, superintendent of nurses, Boston Consumptives' Hospital, Mattapan, Mass.
 Miss Rebecca M. Sullivan, medical stenographer, Boston.
 Miss Annie R. Gordon, private nurse, Ipswich, Mass.
 Miss Elsie Young, married (Mrs. George W. Holmes), Maplewood, Mass.
 Miss Lillian Queenan, at home, East Boston.
 Miss Margaret L. Corbett, private nurse, Boston.
 Miss Margaret J. Crain, Sister of St. Joseph, Canton.

* Married.

Miss Gustena E. Gatchell.

Miss Anna O'Connor, nurse, Boston Consumptives' Hospital, Mattapan.

Miss Christine Chisholm, private nurse, New York.

Mrs. Katherine Berry.

1900.

Miss Priscilla McKenzie, private nurse, New York City.

Miss Caroline J. Foss, private nurse, Reading, Mass.

Miss Christine McIntosh.

Miss Mary A. Sweeney, nurse, Everett, Mass.

Miss Mabel A. Howard, married.

Miss Matilda C. Crain, married (Mrs. A. C. Bryant), Cambridge, Mass.

Miss Mary T. Thompson, married (Mrs. Darwin J. Smith), Belmont, Mass.

Miss Frances McKenzie, private nurse, New York City.

1901.

Miss Elizabeth Wilbur, married, Middleboro, Mass.

Miss Cecil M. Genoud, visiting nurse, Overseers of the Poor, Buffalo, N. Y.

Miss Helen G. Mulcahy, private nurse, Saranac, N. Y.

Miss Alice L. Flint, dead.

Miss Clara Lyons, married (Mrs. William Potter), Jamaica Plain.

Miss Maud M. Neilson, married, British Columbia.

Miss Margaret A. Learson, married (Mrs. Thomas J. O'Brien), dead.

Miss Mabelle C. Caldwell, social settlement work, Welcome Hall, Buffalo, N. Y.

Miss Agnes J. Hasenfuss, private nurse, Saranac Lake, N. Y.

Miss Mary D. Shafner, married (Mrs. George Chisholm), Annapolis, N. S.

Mrs. Eva N. Marine, school nurse, New York City.

Miss Bridget T. Manning, Contagious Hospital, New York City.

Mrs. Alice M. Price, private nurse, Monroe, Wis.

1902.

Miss Marie E. Graham, married (Mrs. Charles C. Haskell), Richmond, Va.

Miss Alice R. Harvey, married (Mrs. George Hanscom), Brockton, Mass.

Miss Catherine G. McCullough, nurse, Contagious Hospital, New Jersey.

Miss Alice B. O'Neil, dead.

Miss Teresa M. Carr, private nurse, Boston.

Miss Ida M. Lewis, married (Mrs. Clarence Rayner), Connecticut.

Miss Bertha M. Pickett, private nurse, Denver, Col.

Miss Margaret Queene, private nurse, Malden, Mass.

Mrs. Caroline H. Garfield, married (Mrs. Fred Hull), Saranac Lake, N. Y.

Miss Mary A. Crowley, matron, Free Home for Consumptives, Dorchester.

Miss Agnes J. Rogers, Fenway Hospital, Boston.

1903.

Miss Elizabeth Friese, dead.

Miss Margaret B. Malloy, married (Mrs. Kaney), Brockton, Mass.

Miss Julia C. Kelly, office nurse with Dr. Kelly, Hancock street, Boston.

Miss Frances Ewens, married (Mrs. Thomas Tracy), West Roxbury, Mass.

Miss Kathleen Smith, married (Mrs. Herbert Johnson), Boston.

Miss Ellen H. Marshall, head nurse, Long Island Hospital.

Miss Johanna D. Shafner, married (Mrs. Harold Clark), Boston.

Miss R. Helen Lucy, private nurse, Saranac Lake, N. Y.

Miss Annie M. Cotter, married (Mrs. William V. Lusk), Fort Bliss, Texas.

Miss Margaret M. Ferguson, private nurse, New Jersey.

Miss Mary McAvoy, nurse, Instructive District Nursing Association, Boston.

1904.

- Miss Ella A. Hayman, private nurse, Cambridge, Mass.
 Miss Alice C. Marshall, private nurse, Lynn, Mass.
 Miss Minna C. Timme, married (Mrs. C. E. Piatt), Bureau of Navigation, Lighthouse Service, Manila, P. I.
 Miss Ellen M. Sullivan, private nurse, Danvers, Mass.
 Miss Ellen C. MacAdam, nurse, Channing Hospital, Boston.
 Miss Ellen A. Sweeney, married (Mrs. Harvey Kelly), Winthrop, Mass.
 Miss Annie LaBrie, private nurse, New York City.
 Miss Lizzie B. Pitkin, private nurse, Boston.
 Miss Mary Adams, private nurse, Boston.
 Miss Myrtle F. Merrifield, married.
 Miss Margaret M. Sheehan, post-graduate course, Women's Hospital, New York City.
 Miss Josephine A. Dohney, married (Mrs. Paul Carson), Brookline, Mass.
 Miss Katherine R. Learson, married (Mrs. William McLaughlin), Providence, R. I.
 Miss Elizabeth G. Phillips, nurse, Board of Health, Boston.
 Miss Caroline A. Fandel, private nurse, Roxbury.
 Miss Adaline M. Tucker, nurse, Contagious Hospital, Lynn, Mass.
 Miss Maud M. Colpitts.
 Miss Clara A. Griffiths, private nurse, Cambridge, Mass.
 Miss Annabell Bent, married.
 Miss Mary M. Campbell, married (Mrs. George Strauch), Waltham, Mass.

1905.

- Miss Catherine O'Donnell, private nurse, Ballardvale, Mass.
 Miss Frances E. Crooks, married (Mrs. William Schley), Everett, Mass.
 Miss Ethel M. Tretheway, married (Mrs. Hugh Malloy), New York.
 Miss Mary A. Mulvey, married (Mrs. William Brophy), Dorchester.
 Miss Mary A. Kilduff, night supervisor of nurses, Boston Consumptives' Hospital, Mattapan, Mass.
 Miss Mary E. Burns, nurse, Glover Hospital, Needham, Mass.
 Miss Mary F. Thompson, visiting tuberculosis nurse, Boston.
 Miss Bessie B. Graham, married.
 Miss Etta Craig McClure, private nurse, New York City.
 Miss Margaret H. Colwell.
 Miss Helen V. Kelley.
 Miss Annie G. VanBuskirk, private nurse, Boston.
 Miss Elizabeth T. Sheehan, private nurse, New York City.
 Miss Edith M. Chute, married (Mrs. George E. Robinson), Annapolis Royal, N. S.

1906.

- Miss Annie S. Dwyer, superintendent, Reede Hospital, Jamaica Plain, Mass.
 Miss Dora A. Sullivan, private nurse, New York City.
 Miss Mabel R. Chambers, private nurse, Boston.
 Miss Margaret M. Adams, private nurse, Boston.
 Miss Vivian C. Sarjeant, married (Mrs. James McDonald), Dorchester.
 Miss Mary E. Dempsey, nurse, Deer Island Hospital.
 Miss Prudence R. Dickinson, private nurse, New York City.
 Miss Sarah M. Boyd, private nurse, Salem, Mass.
 Miss Mary E. Gallagher, post-graduate course, Women's Hospital, New York.
 Miss Lillian B. Lovelace, San Francisco, Cal.
 Miss Mary T. Morrison, private nurse, New York City.
 Miss Ethelwyn M. Owen, private nurse, Montreal.
 Miss Kathleen H. O'Neill, nurse, Board of Health, Yonkers, N. Y.

1907.

- Miss Nora M. Sheehan, private nurse, New York City.
 Miss Ruth McKinnon, private nurse, New York City.
 Mrs. Kathleen M. Neary, married (Mrs. Joseph P. Cunningham), Lynn, Mass.
 Miss Jeannie H. Spiers, private nurse, New York City.
 Miss Harriet M. Cann, private nurse, South Boston.
 Miss Bertha L. Baker, at home, Campello, Mass.
 Miss Margaret A. Clunie, private nurse, Los Angeles, Cal.
 Miss Gertrude C. Shaw, married (Mrs. M. Cassidy), Mace's Bay, N. B.
 Miss Katherine J. McLaughlin, Dominican Sisters, Cancer Hospital, New York.
 Miss Rose Z. Campbell, married (Mrs. Todd), Colorado.
 Miss Mary J. McKenzie, private nurse, Boston.
 Miss Mary G. Hynes, private nurse, New York City.
 Miss Ellen G. Ryan, married, Roxbury.
 Miss Beatrice G. Paige, Psychopathic Hospital, Boston.
 Miss Mary T. McCarthy, married, Roxbury.
 Miss Annie E. F. Walsh, nurse, Boston Consumptives' Hospital, Mattapan, Mass.
 Miss Margaret J. Campbell, night superintendent of nurses, Long Island Hospital.

1908.

- Miss Elizabeth D. Doggett, private nurse, South Boston.
 Miss Anna F. Patten, nurse, Board of Health, Boston.
 Miss Nellie V. Ryan, private nurse, New York City.
 Miss Katherine F. O'Toole, private nurse, New York City.
 Miss Mary B. McFadyen, post-graduate course, Women's Hospital, New York.
 Miss Agnes Nolan, nurse, Instructive District Nursing Association, Revere, Mass.
 Miss Elizabeth Fitzgerald, nurse, Boston Consumptives' Hospital, Mattapan, Mass.
 Miss Anna C. Madden, private nurse, Waltham, Mass.
 Miss Annie M. Carnochan, private nurse, Boston.
 Miss Margaret MacMillan, Saranac, N. Y.
 Miss Mary M. Cudire, nurse, Contagious Hospital, Springfield, Mass.
 Miss Anna M. Allen, matron, Tubercular Hospital, Lawrence, Mass.
 Mrs. Katherine M. Tait, head nurse, Long Island Hospital.
 Miss Alvena F. Lausmann, nurse, Westfield State Sanatorium, Mass.

1909.

- Miss Mary A. Aherne, dead.
 Miss Margaret M. Cain, nurse, Deer Island Hospital.
 Miss Katherine Hennessey, private nurse, Roxbury.
 Miss Bessie R. Strader, at home, Brette, Va.
 Miss Alice G. O'Malley, nurse, Metropolitan Life Insurance Company, Clinton, Mass.
 Miss Elizabeth A. Frazier, Sister of Mercy, Springfield, Mass.
 Miss Edna A. Watson, married (Mrs. Charles Bowman).
 Miss Nellie V. Horan, private nurse, New York City.
 Miss Anna L. Madden, nurse, Tubercular Sanitarium, Bridgewater, Mass.
 Miss Margaret M. McCloskey, married (Mrs. Patrick Murphy), U. S. A.
 Miss Isabella Coffey, married (Mrs. Timothy Casey), Cambridge, Mass.
 Miss Marguerite M. Sullivan, married (Mrs. William Trundy), Dorchester.

1910.

Miss Laura A. Conrad, private nurse, New York City.
Miss Mary J. Sheehan, private nurse, Springfield, Mass.
Miss Catherine M. Powers, private nurse, Dorchester.
Miss Bessie McLean, dead.
Miss Katherine C. McCall, married (Mrs. Elmer Day), Roxbury, Mass.
Miss Ida M. Sirles, private nurse, New York City.
Miss Catherine Malone, private nurse, Boston.
Miss Anna C. Knox, nurse, Gloucester Almshouse, Gloucester, Mass.
Miss Laura M. Plaisted, nurse, Marlboro Hospital, Marlboro, Mass.
Miss Margaret I. Anderson, private nurse, Boston.
Miss Mildred F. Ashley, nurse, Board of Health, Boston.
Miss Astrid M. Petersen, private nurse, Boston.
Miss Rachel Simpson, married (Mrs. A. R. Crowe), Mattapan, Mass.
Miss Mary E. Kennedy, private nurse, Boston.
Miss Annie K. McLaughlin, nurse, Board of Health, Boston.
Miss Annie B. Farrell, nurse, Boston Consumptives' Hospital, Mattapan.
Miss Flora A. Ducharme, nurse, Boston Consumptives' Hospital, Mattapan, Mass.
Miss Mary H. Donovan, nurse, Boston Consumptives' Hospital, Mattapan, Mass.
Miss Eleanor E. O'Toole, post-graduate course, Woman's Hospital, New York City.
Miss Eunice M. Humphrey, head nurse, State Hospital, Tewksbury, Mass.
Miss Sarah Barry, nurse, Board of Health, Boston.

1911.

Miss Margaret A. Connolly, private nurse, Boston.
Miss Helena C. Whalen, nurse, St. Margaret's Hospital, Dorchester.
Miss Ethel Burton, nurse, Contagious Hospital, Cambridge, Mass.
Miss Margaret M. Breslin, head nurse, Long Island Hospital.
Mrs. Helen M. McLoughlin, nurse, Board of Health, Boston.
Miss Margaret M. Murphy, nurse, Board of Health, Boston.
Miss Christy J. Bagnall, private nurse, Alberta, Canada.
Miss Bertha L. Nelson, nurse, Contagious Hospital, Cambridge, Mass.
Miss Marion H. Bailey, private nurse, New York City.
Miss Mary C. Kelley, private nurse, Brockton, Mass.
Miss Mary J. Hickish, private nurse, New York City.
Miss Helen C. Morgan, nurse, Marlboro Hospital, Marlboro, Mass.
Miss Marcella A. Connolly, head nurse, Long Island Hospital.
Miss Mary J. Burke, private nurse, New York City.

1912.

Miss Julia A. Harvey, private nurse, Portsmouth, N. H.
Miss Nora M. Allshouse, married (Mrs. Clarence White), Somerville, Mass.
Miss Geneva A. McDonald, Instructive District Nursing Association.
Miss Marie E. LeBlanc, nurse, Marlboro Hospital, Marlboro, Mass.
Miss Minnie F. Burke, private nurse, Boston.
Miss Martha J. Reeves, private nurse, Taunton, Mass.
Mrs. Della M. Stackpole, private nurse, Brockton, Mass.
Miss Jennie W. Anderson, nurse, Boston Consumptives' Hospital, Mattapan, Mass.
Miss Sarah J. Gilroy, private nurse, Dorchester, Mass.
Miss Annie L. Havey, private nurse, Boston.
Miss Aulien M. Perry, nurse, Peter Bent Brigham Hospital, Boston.
Miss Margaret R. Eldred, private nurse, Andover, Mass.
Miss Ada Cohen, private nurse, Chelsea, Mass.
Miss Emily J. Foley, post-graduate course, Boston Lying-In Hospital.

- Miss Elizabeth M. McMillan, district nurse, Brattleboro, Vt.
Miss Abbie T. Sullivan, private nurse, Somerville, Mass.
Miss Ella P. Richardson, operating-room nurse, Women's Hospital,
Brookline, Mass.
Miss Margaret McNair, nurse, Board of Health, Boston.
Miss Olive G. Ross, married (Mrs. Raymond Gardner), Boston.

1913.

- Miss Mary L. Thomas, private nurse, Portland, Ore.
Miss Margaret I. O'Donnell, nurse, Boston Consumptives' Hospital,
Mattapan, Mass.
Miss Robena McGrandel, post-graduate course, Boston Lying-In Hos-
pital.
Miss Ingaborg L. Vedoe, post-graduate course, Boston Lying-In Hospital.
Miss Agnes C. Quigley, nurse, Deer Island Hospital.
Miss Mary A. Lafferty, post-graduate course, Worcester Contagious
Hospital.
Miss Agnes B. Kelliher, head nurse, Long Island Hospital.
Miss Katherine A. Donovan, post-graduate course, Boston Lying-In
Hospital.
Miss Mary J. Fennessey, head nurse, Long Island Hospital.
Miss Rhoda A. Lamb, nurse, Boston Consumptives' Hospital, Mattapan,
Mass.
Miss Ethel MacMillan, nurse, Boston Consumptives' Hospital, Mattapan,
Mass.
Miss Georgina M. DeCoste, nurse, Boston Consumptives' Hospital,
Mattapan, Mass.
Miss Julia M. Leary, post-graduate course, Worcester Contagious
Hospital.
Miss Jeanne M. Vienneau, nurse, Boston Consumptives' Hospital,
Mattapan, Mass.
Miss Annie J. O'Keefe, nurse, Boston Consumptives' Hospital, Mattapan,
Mass.

1914.

- Miss Mary A. Higgins, nurse, Boston.

APPENDIX I.

TABULAR FINANCIAL STATEMENTS.

APPROPRIATIONS, 1913-14.

Long Island Hospital	\$160,500 00
Almshouse, Charlestown	15,500 00
Pauper expenses	6,000 00
Office expenses	5,500 00
Steamer "George A. Hibbard"	9,000 00
Total	<u>\$196,500 00</u>

EXPENDITURES, 1913-14.

Long Island Hospital	\$182,686 10
Almshouse, Charlestown	15,913 31
Pauper expenses	2,722 08
Office expenses	5,558 12
Steamer "George A. Hibbard"	11,083 75
Total	<u>\$217,963 36</u>

COMPARISON OF EXPENDITURES OF THE INSTITUTIONS FOR THE YEARS ENDING JANUARY 31, 1913, AND JANUARY 31, 1914.

	Expenditure for 12 Months.		Increase.
	Ending Jan. 31, 1913.	Ending Jan. 31, 1914.	
Long Island Hospital	\$170,164 19	\$182,686 10	\$12,521 91
Almshouse, Charlestown	15,702 71	15,913 31	210 60
Totals	\$185,866 90	\$198,599 41	\$12,732 51

INCOME.

ACCOUNTS DEPOSITED WITH CITY COLLECTOR ON ACCOUNT
OF INCOME OF THE DEPARTMENT FOR THE YEAR ENDING
JANUARY 31, 1914.

Long Island Hospital.

Board of inmates	* \$21,024 82
Sale of junk, rags, barrels, etc.	89 00
Physician's fees	8 25
Total	<u>\$21,122 07</u>

Almshouse, Charlestown.

Board of inmates	<u>\$86 14</u>
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ACTUAL COLLECTIONS MADE BY CITY COLLECTOR ON ACCOUNT
OF INCOME OF DEPARTMENT FOR THE YEAR ENDING
JANUARY 31, 1914.

Long Island Hospital	* \$19,567 57
Almshouse, Charlestown	52 29
Total	<u>\$19,619 86</u>

COMPARISON OF ACCOUNTS DEPOSITED WITH CITY COLLECTOR
ON ACCOUNT OF INCOME FOR THE YEARS ENDING JANUARY
31, 1913, AND JANUARY 31, 1914.

	January 31, 1913.	January 31, 1914.	Increase.	Decrease.
Long Island Hospital	\$6,164 59	\$21,122 07	\$14,957 48	.....
Almshouse, Charlestown	98 61	86 14	.....	\$12 47
Totals	\$6,263 20	\$21,208 21	\$14,945 01	

* Over \$15,000 of this amount was due to state subsidy for consumptives (20 months), this being the first year said subsidy has been granted.

COMPARISON OF ACTUAL COST OF THE INSTITUTIONS FOR THE
YEARS ENDING JANUARY 31, 1913, AND JANUARY 31, 1914.

	1913.	1914.			Increase.	Decrease.
	Actual Cost.	Expended.	Actual Income.	Actual Cost.		
Long Island Hospital...	\$164,424 67	\$182,686 10	\$19,567 57	\$163,118 53	.....	\$1,306 14
Almshouse, Charlestown,	15,640 68	15,913 31	52 29	15,861 02	\$220 34	.....
Totals.....	\$180,065 35	\$198,599 41	\$19,619 86	\$178,979 55	.....	\$1,085 80

* AVERAGE EXPENDITURE FOR AND ACTUAL COST OF EACH
INMATE OF THE INSTITUTIONS FOR THE YEAR ENDING
JANUARY 31, 1914.

	EXPENDITURE.		ACTUAL COST.	
	Per Year.	Per Week.	Per Year.	Per Week.
Long Island Hospital.....	\$200 97	\$3 85	\$179 45	\$3 44
Almshouse, Charlestown.....	174 87	3 35	174 30	3 34

Per capita expense in almshouse department, Long Island, per year, \$136.78; per week, \$2.62.

Per capita expense in hospital department, Long Island, per year, \$328.73; per week, \$6.30.

* AVERAGE GROSS EXPENDITURE PER WEEK PER INMATE,
CLASSIFIED.

Long Island Hospital.

YEAR ENDING.	Average Number.	Salaries.	Subsistence.	Fuel and Light.	Clothing and Bedding.	Repairs.	Agricultural Supplies.	Medical Supplies.	All Other Items.	Totals.
January 31, 1910.....	866	\$0 91	\$1 12	\$0 40	\$0 20	\$0 16	\$0 08	\$0 08	\$0 24	\$3 19
January 31, 1911.....	881	1 00	1 24	27	16	18	06	09	24	3 24
January 31, 1912.....	858	1 01	1 39	37	15	14	06	11	27	3 50
January 31, 1913.....	893	1 00	1 45	35	20	17	06	12	29	3 64
January 31, 1914.....	909	1 04	1 57	41	29	09	04	13	28	3 85

* The figures given in these tables are based on the average actual population (after deducting those on leave of absence). (See note on page 38.)

Almshouse, Charlestown.

YEAR ENDING.	Average Number.	Salaries.	Subsistence.	Fuel and Light.	Clothing and Bedding.	Repairs.	Agricultural Supplies.	Medical Supplies.	All Other Items.	Totals.
January 31, 1910.....	99	\$0 85	\$1 06	\$0 45	\$0 19	\$0 44	\$0 17	\$0 03	\$0 28	\$3 47
January 31, 1911.....	102	83	1 09	39	13	05	18	04	30	3 01
January 31, 1912.....	96	88	1 07	42	17	07	21	04	27	3 13
January 31, 1913.....	94	91	1 13	49	08	08	22	03	25	3 19
January 31, 1914.....	91	97	1 09	50	16	08	19	04	32	3 35

* TABLE SHOWING NET COST PER WEEK PER INMATE FOR
LAST FIVE YEARS.

YEAR ENDING.	Jan. 31, 1910.	Jan. 31, 1911.	Jan. 31, 1912.	Jan. 31, 1913.	Jan. 31, 1914.
Long Island Hospital.....	\$3 11	\$3 12	\$3 38	\$3 52	\$3 44
Almshouse, Charlestown.....	3 36	2 98	3 08	3 18	3 34

* The figures given in these tables are based on the average *actual* population (after deducting those on leave of absence). (See note on page 38.)

COMPARISON OF AVERAGE POPULATION AND EXPENDITURES FOR
FIVE YEARS.

Long Island Hospital.

POPULATION.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
Number of inmates beginning fiscal year.....	1,004	970	993	1,006	1,011
Number received during year....	1,261	1,378	1,397	1,429	1,452
Number discharged during year (including deaths).....	1,295	1,355	1,384	1,424	1,394
Number at end of fiscal year....	970	993	1,006	1,011	1,069
Daily average attendance (i. e., number inmates actually present) during fiscal year.....	866	881	858	893	909
Average number officers and employees during fiscal year....	110	113	119	120	119
CURRENT EXPENSES.					
Salaries and wages.....	\$40,932 18	\$45,827 21	\$45,043 96	\$46,864 99	\$49,489 43
Clothing.....	7,074 01	4,768 08	5,404 19	6,806 84	8,749 37
Sustenance:					
Inmates.....	34,958 93	41,158 85	45,354 92	48,307 09	50,114 30
Officers.....	15,552 71	15,643 91	16,759 88	19,517 05	24,141 21
Ordinary repairs and replacements.....	7,198 54	8,190 01	6,466 74	8,045 97	4,517 97
Office, domestic and outdoor expenses.....	38,287 84	33,242 29	37,579 50	40,622 25	45,673 82
Totals.....	\$144,004 21	\$148,830 35	\$156,609 19	\$170,164 19	\$182,686 10
EXTRAORDINARY EXPENSES.					
New buildings, land.....	2,131 50	232 22	20 63	4,000 00	72,743 67
Permanent improvements.....					
Grand totals.....	\$146,135 71	\$149,062 57	\$156,629 82	\$174,164 19	\$255,429 77
PER CAPITA EXPENDITURE FOR INMATES (based on actual attendance):					
Per year.....	\$166 29	\$168 93	\$182 53	\$190 55	\$200 97
Per week.....	3 19	3 24	3 50	3 64	3 85
PER CAPITA EXPENDITURE FOR SUSTENANCE OF OFFICERS AND EMPLOYEES: *					
Per year.....	128 53	126 16	128 92	148 98	184 28
Per week.....	2 47	2 42	2 47	2 85	3 53

* The expenses of the steamer "Geo. A. Hibbard" are not included in the expenses of the institution, and the average number of officers given above does not include the crew (five); neither does it include the six house officers, who serve without salary, nor the clerk of the works employed on the new buildings. Therefore the number of employees is increased by twelve in computing the per capita expenditure for sustenance of officers.

COMPARISON OF AVERAGE POPULATION AND EXPENDITURES FOR
FIVE YEARS.*Almshouse, Charlestown.*

POPULATION.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
Number of inmates beginning fiscal year.....	111	112	109	101	96
Number received during year....	98	87	66	65	57
Number discharged during year (including deaths).....	97	90	74	70	61
Number at end of fiscal year....	112	109	101	96	92
Daily average attendance (i. e., number inmates actually present) during fiscal year.....	99	102	96	94	91
Average number officers and employees during fiscal year.....	10	10	10	10	10
CURRENT EXPENSES.					
Salaries and wages.....	\$4,381 33	\$4,399 70	\$4,392 00	\$4,492 50	\$4,643 00
Clothing.....	768 88	562 46	735 30	373 52	638 95
Sustenance:*					
Inmates }	5,472 32	5,798 06	5,341 78	5,545 12	5,166 18
Officers }					
Ordinary repairs and replacements.....	2,261 97	298 82	364 78	371 13	385 47
Office, domestic and outdoor expenses.....	5,046 25	4,977 77	4,821 74	4,920 44	5,079 71
Totals.....	\$17,930 75	\$16,036 81	\$15,655 60	\$15,702 71	\$15,913 31
EXTRAORDINARY EXPENSES.					
New buildings, land.....					
Permanent improvements.....					
Grand totals.....	\$17,930 75	\$16,036 81	\$15,655 60	\$15,702 71	\$15,913 31
PER CAPITA EXPENDITURE FOR INMATES (based on actual attendance):					
Per year.....	\$181 12	\$157 22	\$163 08	\$167 05	\$174 87
Per week.....	3 47	3 01	3 13	3 19	3 35
PER CAPITA EXPENDITURE FOR SUSTENANCE OF OFFICERS AND EMPLOYEES:					
Per year.....	*	*	*	*	*
Per week.....	*	*	*	*	*

* As the Charlestown Almshouse is a comparatively small institution many supplies are furnished to officers and inmates alike, and a separation of the cost would be impracticable.

EXPENDITURES FOR LONG ISLAND HOSPITAL, 1913-14.

Salaries:

Charles E. Donlan, M. D., Superintendent, January 24, 1913, to January 30, 1914	\$3,557 36	
Employees, January 24, 1913, to January 30, 1914	45,932 07	
		\$49,489 43
Food		74,255 51
Fuel		18,706 38
Clothing		8,749 37
Medical and surgical supplies		5,938 39
Bedding		4,950 11
Repairs and improvements		4,517 97
Furniture and upholstery		3,193 59
Household supplies		2,086 04
Agricultural supplies		1,992 44
Tobacco and snuff		1,193 50
Soap and laundry supplies		1,133 51
Ice		974 00
Liquors		918 44
Disinfectants		900 95
Electric lights		846 25
Printing		677 27
Telephone		411 46
Postage		409 96
Stationery		299 21
Religious services		249 00
Burials		195 89
Lessons in cooking and massage		180 00
Library and school supplies		172 94
Freight		71 81
Entertainment of inmates		67 95
Gasolene		45 78
Transportation		38 80
Autopsy expenses		20 15
Total		<u>\$182,686 10</u>

EXPENDITURES FOR ALMSHOUSE, CHARLESTOWN, 1913-14.

Salaries:

Mary A. Morris, Superintendent,
January 1, 1913, to December

31, 1913 \$1,200 00

Employees 3,443 00

\$4,643 00

Food 5,166 18

Fuel 1,997 44

Agricultural supplies 893 53

Clothing 638 95

Repairs and improvements 385 47

Electric lights 344 43

Household supplies 323 15

Ice 289 85

Tobacco and snuff 283 16

Furniture and upholstery 212 12

Medical and surgical supplies 199 07

Soap and laundry supplies 157 63

Telephone 114 63

Bedding 96 41

Transportation 40 00

Printing 34 85

Postage 31 56

Disinfectants 18 75

Gas 14 00

Liquors 10 00

Library and school supplies 6 00

Stationery 4 58

Entertainment of inmates 2 75

Oils 2 40

Religious services 1 80

Freight 1 60

Total \$15,913 31

EXPENDITURES FOR PAUPER EXPENSES, 1913-14.

Support of poor in charge of Commonwealth \$2,044 70

Support of poor in charge of cities and towns 365 39

Support of poor at Foxboro State Hospital 151 82

Support of poor at Monson State Hospital 142 53

Support of poor at Massachusetts School for the

Feeble Minded 17 64

Total \$2,722 08

EXPENDITURES FOR OFFICE EXPENSES, 1913-14.

Salaries	\$3,543 30
Printing	380 31
Telephone	238 85
Stationery	151 14
Postage	74 24
Office expense	20 80
Messenger service	18 37

Total	<u>\$4,427 01</u>
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Expenses incidental to sale of Charlestown

Almshouse	<u>1,131 11</u>
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Total	<u><u>\$5,558 12</u></u>
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EXPENDITURES FOR STEAMER "GEORGE A. HIBBARD,"
1913-14.

Salaries	\$5,514 71
Fuel	3,309 64
Repairs	1,534 29
Chandlery	686 41
Furniture	33 67
Printing	5 03

Total	<u><u>\$11,083 75</u></u>
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SPECIAL LOAN APPROPRIATIONS.

 APPROPRIATION FOR NEW BUILDINGS, LONG ISLAND.

Balance from 1912-13	\$1,000 00
Plans	1,000 00
Total	<u>\$2,000 00</u>

 APPROPRIATION FOR KITCHEN, REFECTORY AND DORMITORY,
LONG ISLAND.

Balance from 1912-13	\$72,000 00
General Contractor:	
Marr Brothers & Stewart Co.	\$60,975 60
Architect's fees	8,774 04
Incidentals	1,994 03
	<u>71,743 67</u>
Balance	<u>\$256 33</u>

LONG ISLAND IMPROVEMENTS.

Amount of appropriations	<u>\$210,000 00</u>
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No drafts.

INVENTORY AND APPRAISAL OF REAL AND PERSONAL ESTATE, JANUARY 31, 1914.

OFFICE OF THE TRUSTEES, BOSTON.

Furniture, etc.	\$942 13
Stationery and office supplies	448 88
Total	<u>\$1,391 01</u>

LONG ISLAND HOSPITAL.

Land	\$508,800 00
Hospital	130,000 00
Men's building	90,000 00
Women's building	65,000 00
Nurses' Home	20,000 00
Chapel	10,000 00
Residence of superintendent	9,500 00
Mortuary	8,000 00
Power house and equipment	75,000 00
Waterworks	22,000 00
Electrical plant	9,000 00
Two wharves, with houses	30,000 00
Tie-up for cattle	4,000 00
Cottage and barn	4,000 00
Piggery, hen house, etc.	1,300 00
Ice house	500 00
New buildings (in process of construction)	74,000 00
	\$1,061,100 00
Furniture and household supplies	11,275 54
Clothing, bedding and dry goods	13,221 64
Provisions and groceries	4,560 74
Soap and laundry supplies	247 24
Library supplies	250 00
Stationery	161 30
Medical and surgical supplies	4,434 66
Liquors	306 01
Tobacco and snuff	109 38
Oils, paints and gasoline	200 00
Fuel	1,140 00
Building materials and tools	1,665 50
Agricultural supplies (feed for cattle, etc.)	540 50
Carriages and agricultural implements	1,305 25
Live stock (7 horses, 3 cattle, 165 pigs, 130 poultry)	3,647 00
Ice	275 00
Total	<u>\$1,104,439 76</u>

ALMSHOUSE, CHARLESTOWN.

Land, garden lot	\$20,300 00
(Remainder of land, with buildings, sold to Boston Elevated Railway Company during 1911.)	
Mechanical fixtures	1,371 00
Furniture and household supplies	2,197 65
Clothing, bedding and dry goods	1,824 07
Provisions and groceries	483 77
Soap and laundry supplies	27 25
Library supplies	10 00
Stationery	30 00
Medical and surgical supplies	57 85
Tobacco and snuff	68 50
Fuel	6 00
Building materials and tools	140 20
Agricultural supplies (feed for cattle, etc.)	26 35
Carriages, wagons and agricultural implements	223 70
Live stock (1 horse, 3 cows, 6 pigs, 50 hens)	390 00
Total	<u>\$27,156 34</u>

Steamer "George A. Hibbard" and equipment	<u>\$37,500 00</u>
---	--------------------

RECAPITULATION OF VALUATION.

Office of the trustees, Boston	\$1,391 01
Long Island Hospital	1,104,439 76
Alms house, Charlestown	27,156 34
Department steamer	37,500 00
Total	<u>\$1,170,487 11</u>

STAFF OF OFFICERS AND SALARIES PAID JANUARY 31, 1914.

TRUSTEES' OFFICE.

Designation of Office.	Salary per Month.
* 1 Executive clerk (at 28 Court square, Boston)	\$125 00
* 1 Bookkeeper " " "	83 33
* 1 Clerk " " "	58 33
* 1 Clerk " " "	50 00

LONG ISLAND HOSPITAL.

	Salary per Week.
1 Superintendent	\$67 12
1 Resident physician	34 52
* 1 Pathologist	9 58
* 1 Roentgenologist	7 67
6 House officers (unpaid)	—
1 Druggist	23 01
1 Chief clerk	23 01
1 Bookkeeper	11 50
1 Stenographer	13 80
*† 1 Mail messenger	2 30
1 Chief officer of men's building	28 76
1 Storekeeper	16 11
1 Meatcutter	16 11
1 Chief engineer	28 76
1 Assistant engineer	20 00
3 Assistant engineers	18 00
3 Firemen	13 43
1 Farmer	16 11
3 Assistant farmers	5 75
1 Gardener	9 20
3 Watchmen	11 50
1 Carpenter	12 66
1 Laundryman	12 66
10 Orderlies	6 90 to 8 05
1 Baker	13 80
1 Cook (male)	11 50
1 Matron	9 20
10 Matrons	6 90
2 Housekeepers	6 90

* Nonresident at institution.

† Employed also by Institutions Registration Department and Children's Institutions Department.

Designation of Office.	Salary per Week.
1 Superintendent of nurses	\$15 34
1 Night superintendent of nurses	11 50
8 Head nurses	11 50
19 Nurses (second year training)	2 76
21 Nurses (first year training)	2 30
1 Cook	8 05
3 Cooks	5 75 to 6 90
1 Assistant cook	4 60
2 House maids	4 60
5 Ward maids	4 14 to 4 60
4 Laundresses	4 14 to 4 60

FOR RELIGIOUS SERVICES AT LONG ISLAND.

1 Chaplain	\$11 50
* 1 Chaplain	11 50
* 1 Organist	6 90
* 1 Organist	2 88

ALMSHOUSE, CHARLESTOWN.

	Salary per Month.
1 Superintendent	\$125 00
* 1 Visiting physician	40 00
1 Farmer	40 00
1 Engineer	60 00
1 Watchman	25 00
1 Matron	35 00
2 Matrons	30 00
1 Cook	30 00
1 Baker	17 00

STEAMER "GEORGE A. HIBBARD."

	Salary per Week.
1 Captain	\$26 85
1 Mate and pilot	24 93
1 Engineer	19 56
1 Assistant engineer	17 25
2 Firemen	11 50
4 Deckhands	9 20

* Nonresident at institution.

FARM PRODUCTS — LONG ISLAND HOSPITAL.

225	tons ice at \$3	\$675 00
507	dozen eggs at 30 cents	152 10
12,050½	pounds hogs at 10½ and 11 cents	1,234 46
12	bushels lettuce at 75 cents	9 00
500	pounds rhubarb at 1½ cents	7 50
75	dozen radishes at 5 cents	3 75
25	bushels peas at \$1.50	37 50
37	bushels beans at \$1	37 00
177	barrels cabbages at \$1	177 00
40	dozen cucumbers at 25 cents	10 00
50	bushels parsnips at 75 cents	37 50
10,400	pounds squash at 1½ cents	156 00
250	dozen corn at 20 cents	50 00
100	bushels tomatoes at \$1.50	150 00
562	bushels carrots at 75 cents	421 50
50	bushels beets at \$1	50 00
9,581	quarts milk at 6 cents	574 86
585	pounds beef at 13. cents	76 05
Total		<u>\$3,859 22</u>

FARM PRODUCTS — CHARLESTOWN ALMSHOUSE.

52	barrels cabbages at \$1	\$52 00
11	bushels beans at \$1	11 00
5	bushels peas at \$1.50	7 50
250	dozen sweet corn at 20 cents	50 00
900	heads lettuce at 3 cents	27 00
8	dozen radishes at 5 cents	40
38	bushels tomatoes at \$1.50	57 00
8	tons fodder corn at \$4	32 00
3	tons rye at \$4	12 00
75	bushels beets at \$1	75 00
49	bushels carrots at 75 cents	36 75
65	bushels parsnips at 75 cents	48 75
20	bushels Swedish turnips at \$1	20 00
80	bushels mangles at 50 cents	40 00
143¾	dozen eggs at 30 cents	43 12
9,390	quarts milk at 6 cents	563 40
600	pounds rhubarb at 1½ cents	9 00
1,314	pounds hogs at 11¼ and 11½ cents	150 42
Total		<u>\$1,235 34</u>

POPULATION STATISTICS, LONG ISLAND HOSPITAL.

DAY OF MONTH.	February, 1913.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January, 1914.
1.....	1,011	1,054	949	900	838	821	848	838	844	882	931	1,012
2.....	1,012	1,050	940	902	838	827	850	837	840	887	935	1,015
3.....	1,012	1,049	939	905	833	821	851	839	843	888	939	1,016
4.....	1,008	1,046	943	903	832	828	850	836	847	868	940	1,020
5.....	1,012	1,052	941	903	832	826	853	835	852	868	942	1,017
6.....	1,021	1,039	940	887	829	826	855	837	852	872	947	1,026
7.....	1,020	1,041	940	875	834	826	850	838	854	872	949	1,029
8.....	1,025	1,040	942	869	834	831	850	837	858	878	949	1,029
9.....	1,030	1,040	939	864	834	831	848	831	858	884	947	1,032
10.....	1,029	1,040	937	858	827	833	849	833	863	883	953	1,033
11.....	1,034	1,032	938	864	833	836	847	836	868	887	952	1,033
12.....	1,041	1,031	939	865	820	840	843	841	867	888	960	1,034
13.....	1,044	1,031	938	859	820	841	844	844	866	890	968	1,002
14.....	1,046	1,033	938	860	826	841	844	843	866	892	974	1,014
15.....	1,047	1,032	935	856	824	845	846	843	868	894	974	1,022
16.....	1,047	1,024	931	859	824	849	847	843	868	895	977	1,030
17.....	1,046	1,024	930	859	812	843	845	842	869	895	985	1,032
18.....	1,042	1,013	933	862	810	840	844	837	869	896	990	1,032
19.....	1,047	1,015	930	861	817	837	840	837	865	899	994	1,032
20.....	1,053	1,018	928	849	815	834	839	843	865	903	996	1,033
21.....	1,054	1,014	928	849	814	834	842	845	864	907	996	1,037
22.....	1,062	1,015	919	845	818	836	847	844	869	908	994	1,046
23.....	1,062	1,013	913	841	816	835	853	823	870	908	994	1,049
24.....	1,061	1,011	919	841	814	831	848	820	871	908	998	1,051
25.....	1,050	1,002	916	838	810	834	847	826	874	913	998	1,048
26.....	1,056	995	915	837	813	840	849	831	874	922	997	1,048
27.....	1,054	990	914	830	819	842	853	833	874	928	1,000	1,048
28.....	1,054	997	914	829	824	842	847	838	876	927	1,004	1,050
29.....	.....	997	900	831	822	838	846	838	881	931	1,002	1,056
30.....	.....	988	903	837	821	845	847	842	881	932	1,007	1,057
31.....	.....	988	.....	834	.....	846	838	.....	883	.....	1,007	1,062
Maximum.....	1,062	1,054	949	905	838	849	855	845	883	932	1,007	1,062
Minimum.....	1,008	988	900	829	810	821	838	820	840	872	931	1,002
Average.....	1,039	1,023	929	860	823	835	847	837	864	897	974	1,034

Average, 913.*

Maximum, 1,062.

Minimum, 810.

* The average here given shows the average number recorded as inmates, and includes those on leave of absence; whereas the average population on which the per capita expenditure and cost is based (909) is the number actually in the institution, excluding those on leave.

NOTE.—The above figures give the morning census. On January 31, 1914, there were eight admissions and one discharge, which would make the morning census for February 1, 1914, 1,069.

LONG ISLAND HOSPITAL.

Movement of Population.

	Males.	Females.	Totals.		Males.	Females.	Totals.
Remaining Jan. 31, 1913	550	461	1,011	Discharged during year,	844	319	1,163
Admitted since	1,010	413	1,423	Died during year	111	120	231
Born	16	13	29	Remaining Jan. 31, 1914,	621	448	1,069
Grand totals	1,576	887	2,463	Grand totals	1,576	887	2,463

ALMSHOUSE, CHARLESTOWN.

Movement of Population.

	Males.	Females.	Totals.		Males.	Females.	Totals.
Remaining Jan. 31, 1913	48	48	96	Discharged during year,	34	23	57
				Died during year	2	2	4
Admitted since	38	19	57	Remaining Jan. 31, 1914,	50	42	92
Grand totals	86	67	153	Grand totals	86	67	153

NUMBER OF INMATES REMAINING IN THE INSTITUTIONS
JANUARY 31, 1913, AND 1914.

	Jan. 31, 1913.	Jan. 31, 1914.	Increase.	Decrease.
Long Island Hospital	1,011	1,069	58	.....
Alms house, Charlestown	96	92	.....	4
Totals	1,107	1,161	54	

* AVERAGE NUMBER OF INMATES DURING THE YEARS ENDING
JANUARY 31, 1913, AND 1914.

	1912.	1914.	Increase.	Decrease.
Long Island Hospital	897	913	16	.....
Alms house, Charlestown	96	94	.....	2
Totals	993	1,007	14	

* These figures give the average population, including those on leave of absence. (See notes on pages 24 and 25.)

ADULT MALES (779) ADMITTED DURING YEAR ENDING JANUARY 31, 1914.

MEN.	AGE PERIODS.							Totals.	Per Cent.	
	16 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 to 75.	75 to 85.			OVER 85.
SOCIAL CONDITION.										
Single.....	15	63	118	157	90	20	3	.....	466	60—
Married.....	1	15	27	48	47	25	4	.....	167	21+
Widowed.....	.....	2	16	32	50	26	8	1	135	17+
Divorced or separated.....	.....	.....	.....	4	4	2	.....	.....	10	1+
Deserted.....	.....	.....	.....	1	.....	.....	.....	.....	1	0+
Totals.....	16	80	161	242	191	73	15	1	779	.....
Per cent.....	2+	10+	21—	31+	24—	9+	2—	0+	.....	.....
NUMBER OF TIMES ADMITTED TO ALMSHOUSE.										
1.....	14	47	66	82	62	41	9	1	322	41+
2 to 10.....	2	32	80	98	82	25	6	.....	325	42—
10 to 20.....	.....	.....	13	36	31	4	.....	.....	84	10+
20 to 30.....	.....	.....	2	17	6	.....	.....	.....	25	3+
30 or over.....	.....	1	.....	9	10	3	.....	.....	23	3—
Totals.....	16	80	161	242	191	73	15	1	779	.....
ADMITTED ON ARRIVAL TO										
Hospital.....	8	29	48	37	26	15	5	1	169	22—
Dormitory.....	8	51	113	205	165	58	10	.....	610	78+
Totals.....	16	80	161	242	191	73	15	1	779	.....
DISCHARGE AND READMISSION.										
Died.....	.....	9	10	11	12	14	3	.....	59	7+
Discharged.....	9	40	60	69	43	18	1	1	241	31—
Discharged and readmitted*....	4	12	33	68	41	11	1	.....	170	22—
Remaining January 31, 1914..	3	19	58	94	95	30	10	.....	309	39+
Totals.....	16	80	161	242	191	73	15	1	779	.....

* Of the 170 discharged and readmitted, 4 died after readmission, 35 were discharged and 131 were in the institution on January 31, 1914.

BASIS OF ABOVE EXAMINATION.

Total admissions to Long Island, 1,452, and Charlestown, 57.....	1,509
Deducting all readmissions (288) and transfers (10).....	298
Leaves as the number of individuals admitted during the year.....	1,211
Deducting admissions of children under 16 years of age (see page 41).....	62
Leaves as a basis of above examinations, 779 men and 370 women.....	<u>1,149</u>

ADULT FEMALES (370) ADMITTED DURING YEAR ENDING JANUARY 31, 1914.

WOMEN.	AGE PERIODS.								Totals.	Per Cent.
	16 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 to 75.	75 to 85.	Over 85.		
SOCIAL CONDITION.										
Single.....	29	7	4	16	11	15	6	1	89	24+
Married.....	5	18	28	23	17	14	3	...	108	29+
Widowed.....	...	1	14	36	48	35	17	4	155	42—
Divorced or separated.....	...	2	2	4	6	...	...	...	14	3—
Deserted.....	...	2	...	...	1	1	...	...	4	1+
Totals.....	34	30	48	79	83	65	26	5	370	
Per cent.....	9+	8+	13—	21+	22+	18—	7+	1+		
NUMBER OF TIMES ADMITTED TO ALMSHOUSE.										
1.....	31	23	31	45	41	41	17	4	233	63—
2 to 10.....	3	7	15	28	36	20	9	1	119	32+
10 to 20.....	...	...	2	5	3	3	...	...	13	4—
20 to 30.....	...	...	...	1	3	...	...	...	4	1+
30 or over.....	...	...	...	...	...	1	...	...	1	0+
Totals.....	34	30	48	79	83	65	26	5	370	
ADMITTED ON ARRIVAL TO										
Hospital.....	29	21	27	41	32	29	10	...	189	51+
Dormitory.....	5	9	21	38	51	36	16	5	181	48+
Totals.....	34	30	48	79	83	65	26	5	370	
STATUS AT JANUARY 31, 1914.										
Died.....	...	2	6	16	10	12	8	1	55	14+
Discharged.....	25	18	23	23	25	16	2	2	134	36+
Discharged and readmitted *.....	2	2	4	9	10	5	...	...	22	9—
Remaining January 31, 1914.....	7	8	15	31	38	32	16	2	149	40+
Totals.....	34	30	48	79	83	65	26	5	370	

* Of the 32 discharged and readmitted, 1 died after readmission, 9 were discharged and 22 were in the institution on January 31, 1914.

BIRTHPLACE OF ADULTS ADMITTED DURING THE YEAR ENDING JANUARY 31, 1914.

	INMATES.				PARENTS.	
	Men.	Women.	Totals.	Per Cent.	Number.	Per Cent.
Boston.....	494	101	595	52—	105	5—
Other cities and towns in United States.....	106	59	165	14+	216	9+
At sea.....	1	.....	1	0+	1	0+
Foreign countries,	176	209	385	34—	1,889	81+
Unknown.....	2	1	3	0+	87	4--
Totals.....	779	370	1,149	.....	2,298	

CHILDREN UNDER 16 YEARS OF AGE (62)

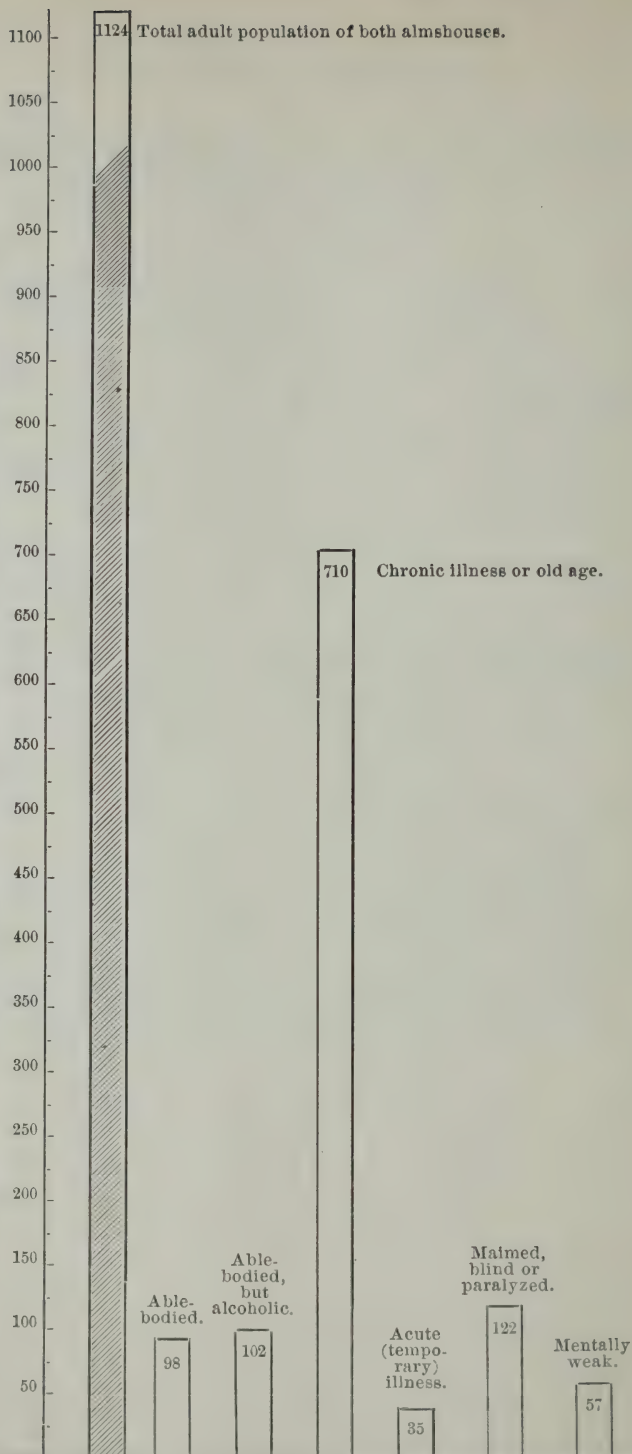
ADMITTED DURING THE YEAR ENDING JANUARY 31, 1914.

ADMITTED.		DISCHARGED.	
Born at Long Island.....	29	Died.....	3
Admitted.....	33	Discharged.....	34
(15 were admitted with mother and 18 were in care of Trustees for Children.)		Discharged and readmitted *.....	3
		Remaining.....	22
Total.....	62	Total.....	62

* Of the 3 discharged and readmitted, all were in the institution on January 31, 1914.

CHART

Showing the Proportion of Able-bodied Inmates, and of those Incapacitated for Self-support, to the Total Adult Population of Long Island Hospital, and of Almshouse at Charlestown, on January 31, 1914.



NOTE.—These categories, though not given as medical statements, are yet, we believe, accurate for all practical purposes, and have been carefully determined by the superintendents of the two institutions. Each individual is counted in one category only, although many might fairly appear in two or even three categories; as, for instance, a man who is old may be lame, and also be suffering from acute bronchitis, which would place him under three categories, while he appears in this chart under but one.

LONG ISLAND HOSPITAL STATISTICS.

Movement of Population.

	Males.	Females.	Totals.
ADMISSIONS.			
Inmates:			
Remaining in hospital January 31, 1913.....	143	176	319
Admitted during year.....	477	455	932
Born during year.....	16	13	29
Totals.....	636	644	1,280
DISCHARGES.			
Inmates:			
Discharged during year.....	380	348	728
Died during year.....	111	120	231
Remaining January 31, 1914.....	145	176	321
Totals.....	636	644	1,280

Maximum population, 322; minimum, 279; daily average, 304.

Besides the cases enumerated above and not included in the medical statistics, the following persons, not inmates, received treatment:

2 from boats in harbor.
2 from new buildings, Long Island.

DISEASES TREATED DURING THE YEAR ENDING JANUARY 31, 1914.

	Treated.	Discharged Improved.	Dead.	Remaining.
Abscess, ischiorectal.....	1	.....	1	.....
Abscess, perirectal.....	1	1	.....	.....
Abscess, cervical.....	1	1	.....	.....
Abscess, neck.....	2	2	.....	.....
Abscess, alveolar.....	1	1	.....	.....
Abscess, retrocecal.....	1	1	.....	.....
Abscess, tonsillar.....	1	.....	.....	1
Abscess, superficial.....	3	1	.....	2
Acne vulgaris.....	8	5	.....	3
Acne rosacea.....	1	.....	1	.....
Adenitis.....	4	3	.....	1
Alcoholism.....	82	63	6	13
Amputation (old), leg.....	4	2	.....	2
Amputation (old), toes.....	2	2	.....	.....
Amputation (old), arm.....	1	1	.....	.....
Anæmia.....	6	1	4	1
Appendicitis.....	5	1	2	2
Arthritis, Chronic hypertrophic...	37	27	4	6
Arthritis, gonorrhœal.....	2	2	.....	.....
Ascites.....	3	2	1	.....
Asthma.....	17	12	3	2
Atrophy, progressive muscular....	2	2	.....	.....
Bladder, hypertrophy of.....	1	.....	1	.....
Burns, cicatrix of foot.....	3	3	.....	.....
Cellulitis of leg.....	6	4	1	1
Cellulitis of forearm.....	1	1	.....	.....
Chancroid.....	2	2	.....	.....
Chorea.....	1	.....	1	.....
Bruises of hand.....	1	1	.....	.....
Bruises of back and shoulder....	1	1	.....	.....
Lacerations perineum.....	5	1	.....	4
Abrasions.....	2	2	.....	.....
Contusions.....	2	2	.....	.....
Dislocations.....	6	3	1	2

DISEASES TREATED DURING THE YEAR ENDING JANUARY 31, 1914.—
Continued.

	Treated.	Discharged Improved.	Dead.	Remaining.
Cystitis.....	11	7	2	2
Cystocele.....	3	3		
Debility.....	3	3		
Dermatitis.....	1		1	
Scurvy.....	1			1
Diabetes.....	12	8	2	2
Diarrhœa.....	1	1		
Diphtheria.....	12	5	1	6
Otitis media.....	3	3		
Eczema.....	4	3	1	
Embolus, puly.....	1		1	
Embolus.....	1	1		
Endarteritis, cerebral.....	4	2		2
Colitis.....	2		2	
Entero-colitis.....	5	4	1	
Enteritis.....	4	3		1
Ileo-colitis.....	11	9	2	
Epididymitis.....	7	6		1
Epilepsy.....	11	9	1	1
Erysipelas.....	4	3		1
Erythema.....	2	1		1
Blindness.....	1	1		
Cataracts.....	17	10	3	4
Conjunctivitis.....	8	6		2
Corneal ulcer.....	4	1	1	2
Corneal opacity.....	2	1		1
Episcleritis.....	1	1		
Fluid vitreous.....	1			1
Keratitis.....	1		1	
Ophthalmia, gonorrhœal.....	3	2		1
Pterygium.....	1	1		
Ptosis of eye.....	2	2		
Fistula.....	4	3		1
Fractures (old).....	54	36	5	13
Frozen toes.....	1			1
Furunculosis.....	3	1	1	1
Cholelithiasis.....	3	1	1	1
Gangrene.....	3	1	1	1

DISEASES TREATED DURING THE YEAR ENDING JANUARY 31, 1914.—
Continued.

	Treated.	Discharged Improved.	Dead.	Remaining.
Gastritis.....	6	5	1	.....
Gastric crises.....	2	2	.....	.....
Gastric neurosis.....	2	1	.....	1
Gastrointestinal urticaria.....	1	1	.....	.....
General paresis.....	11	8	2	1
Goitre.....	1	.....	1	.....
Gonorrhœa.....	20	12	.....	8
Gout.....	1	1	.....	.....
Hemorrhage, cerebral.....	16	2	9	5
Cerebral thrombosis.....	1	.....	1	.....
Purpura rheumatica.....	1	1	.....	.....
Hemorrhoids.....	15	8	2	5
Aneurysm.....	3	1	2	.....
Broken compensation.....	32	8	18	6
Endocarditis, aortic.....	78	45	26	7
Endocarditis, mitral.....	229	126	50	53
Endocarditis, tricuspid.....	4	2	2	.....
Cardiac arrhythmia.....	5	2	1	2
Cardio-renal.....	17	1	15	1
Hypertrophy and dilatation.....	25	12	8	5
Myocarditis.....	48	15	23	10
Pericarditis.....	2	.....	2	.....
Hemiplegia.....	22	10	3	9
Monoplegia.....	1	.....	.....	1
Hernia.....	48	31	11	6
Herpes zoster.....	2	2	.....	.....
Hydrocele.....	2	1	1	.....
Hydrocephalus.....	1	1	.....	.....
Hydropneumothorax.....	1	.....	1	.....
Hydrothorax.....	2	1	.....	1
Hysteria.....	7	5	.....	2
Intestinal indigestion.....	3	1	1	1
Infected hand.....	5	5	.....	.....
Infected foot.....	5	3	.....	2
Infected wound.....	2	.....	2	.....
Influenza.....	1	1	.....	.....
Jaundice.....	1	.....	1	.....
Ankylosis of joints.....	3	1	2	.....

DISEASES TREATED DURING THE YEAR ENDING JANUARY 31, 1914.—

Continued.

	Treated.	Discharged Improved.	Dead.	Remaining.
Bursitis.....	1	1		
Synovitis.....	1	1		
Undescended scapula.....	1			1
Tubercular joints.....	8	1	4	3
Chronic interstitial nephritis.....	61	34	19	8
Movable kidney.....	3	1		2
T. B. kidney.....	1	1		
Hydronephrosis.....	1	1		
Cystic kidney.....	1			1
Pyelitis.....	2		1	1
Pyelonephritis.....	1	1		
Lactation.....	4	1		3
Leukoderma.....	1	1		
Cirrhosis of liver.....	8	5	3	
Passive congestion of liver.....	1		1	
Hypertrophy of liver.....	1			1
Yellow atrophy of liver.....	1		1	
Bronchitis, chronic.....	43	26	9	8
Congestion of lungs.....	7	4	2	1
Emphysema.....	30	17	8	5
Empyema.....	4	3	1	
Lupus.....	3	2		1
Malnutrition.....	6	1		5
Rachitis.....	2			2
Mastitis.....	1	1		
Meningitis.....	3		2	1
Mental.....	30	25	4	1
Feeble-minded.....	1			1
Hypochondriac.....	1	1		
Paranoia.....	1	1		
Morphinism.....	7	3	1	3
Myelitis.....	4	2		2
Myosytis.....	2	2		
Neurasthenia.....	3	2		1
Neuritis.....	17	11	5	1
Polyneuritic psychoses.....	1		1	
Neuralgia.....	2	2		
No disease.....	34	8		26

DISEASES TREATED DURING THE YEAR ENDING JANUARY 31, 1914.—

Continued.

	Treated.	Discharged Improved.	Dead.	Remaining.
Premature birth.....	1	.....	1	.....
Asphyxia neonatorum.....	1	.....	1	.....
Deviated septum.....	2	2	.....	.....
Obesity.....	7	3	4	.....
Edema.....	9	1	6	2
Orchitis.....	2	1	1	.....
Osteomyelitis.....	5	4	1	.....
Otitis deformans.....	1	.....	.....	1
Acute hemorrhagic pancreatitis...	1	.....	1	.....
Paralysis agitans.....	7	3	1	3
Paralysis facial.....	2	2	.....	.....
Paralysis infantile.....	2	1	1	.....
Paralysis intestinal.....	1	.....	1	.....
Paralysis spastic.....	1	1	.....	.....
Paralysis flaccid.....	1	1	.....	.....
Paraplegia.....	4	1	1	2
Progressive muscular atrophy.....	2	.....	.....	2
Crutch palsy.....	1	1	.....	.....
Pediculosis.....	23	11	7	5
Pellagra.....	1	.....	1	.....
Peritonitis.....	3	1	2	.....
Laryngitis.....	8	3	2	3
Pharyngitis.....	1	1	.....	.....
Phlebitis.....	2	2	.....	.....
Pleuritis.....	39	18	10	11
Pneumonia.....	78	13	62	3
Post-operative shock.....	1	.....	1	.....
Post-operative resection.....	1	1	.....	.....
Post-operative T. B. sinus.....	1	.....	1	.....
Pregnancy.....	35	22	1	12
Abortion.....	1	1	.....	.....
Carcinoma of prostate.....	1	.....	1	.....
Hypertrophied prostate.....	3	2	1	.....
Chronic prostatitis.....	1	1	.....	.....
Psoriasis.....	1	1	.....	.....
Prolapse of rectum.....	1	1	.....	.....
Rhinitis.....	1	1	.....	.....
Arteriosclerosis.....	130	58	32	40

DISEASES TREATED DURING THE YEAR ENDING JANUARY 31, 1914.—
Continued.

	Treated.	Discharged Improved.	Dead.	Remaining.
Lateral sclerosis.....	2	1	1	.....
Multiple sclerosis.....	4	1	2	1
Scoliosis.....	3	2	.....	1
Senility.....	60	24	18	18
Septicemia.....	1	.....	1	.....
Kyphosis.....	4	2	2	.....
Sprain.....	3	2	.....	1
Status lymphaticus.....	1	.....	1	.....
Syphilis.....	52	37	8	7
Gumma.....	2	1	1	.....
Syphilitic periostitis.....	1	.....	.....	1
Tabes.....	21	11	4	6
Tænia versicolor.....	1	1	.....	.....
Tænia tonsurans.....	2	2	.....	.....
Tænia circinata.....	1	1	.....	.....
Tonsillitis.....	1	1	.....	.....
Phthisis.....	156	44	41	71
Healed T. B.....	11	3	1	7
T. B. glands.....	1	.....	.....	1
Carcinoma, jaw.....	2	.....	2	.....
Carcinoma, uterus.....	3	1	2	.....
Carcinoma, hepatic flexure.....	1	.....	1	.....
Carcinoma, axilla.....	1	.....	1	.....
Carcinoma, rectum.....	7	.....	7	.....
Carcinoma, intestines.....	1	.....	1	.....
Carcinoma, prostate.....	1	.....	1	.....
Carcinoma, gastric.....	1	.....	.....	1
Carcinoma, breast.....	7	2	3	2
Carcinoma, liver.....	2	.....	2	.....
Carcinoma, cervix.....	1	.....	1	.....
Carcinoma, oper (tongue).....	1	.....	.....	1
Carcinoma lip.....	1	.....	.....	1
Tumor of breast.....	1	1	.....	.....
Tumor of brain.....	1	1	.....	.....
Mult-angio.....	1	1	.....	.....
Tumor of hypogastrium.....	1	1	.....	.....
Varicocele.....	4	3	.....	1
Sarcoma of frontal sinus.....	1	.....	1	.....

DISEASES TREATED DURING THE YEAR ENDING JANUARY 31, 1914.—
Concluded.

	Treated.	Discharged Improved.	Dead.	Remaining.
Lipoma.....	3	3	.....	.....
Recurrent epithelioma of ear.....	1	.....	.....	1
Multiple fibroma.....	2	.....	.....	2
Sarcoma of nose.....	2	1	.....	1
Sarcoma orbit.....	1	.....	1	.....
Varicose ulcers.....	28	19	3	6
Miscellaneous ulcers.....	11	9	1	1
Uremia.....	2	.....	2	.....
Phimosis.....	4	3	1	.....
Stricture urethra.....	2	1	1	.....
Urethritis.....	5	4	.....	1
Endometritis.....	1	1	.....	.....
Retroversion.....	2	2	.....	.....
Prolapse of uterus.....	4	4	.....	.....
Retroverted uterus.....	1	1	.....	.....
Vaginitis.....	11	8	1	2
Varicella.....	15	8	.....	7
Bichloride poisoning.....	1	.....	1	.....
Ingrown toe-nail.....	1	1	.....	.....
Totals.....	2,197	1,128	553	516

APPENDIX II.

*Chapter 395 of the Acts of 1897, as Amended by Chapter
451 of the Acts of 1897.*

AN ACT TO ESTABLISH SEPARATE DEPARTMENTS OF THE CITY
OF BOSTON FOR THE CARE OF CHILDREN, PAUPERS, INSANE
PERSONS AND CRIMINALS.

Be it enacted, etc., as follows:

SECTION 1. The Children's Institutions Department, the Pauper Institutions Department, the Insane Hospital Department and the Institutions Registration Department, of the City of Boston, are hereby created as departments of said city, and shall be under the charge of the officers herein designated therefor. Said officers shall be citizens or taxpayers of said city, and shall be appointed by the mayor of said city without confirmation by the board of aldermen. The provisions of chapter two hundred and sixty-six of the Acts of the year eighteen hundred and eighty-five, and of all other acts relating to the departments of the City of Boston, or the officers or employees thereof, except as otherwise herein provided, shall be applicable to said departments and the officers and employees thereof.

SECT. 2. Each of said departments, except the Institutions Registration Department, shall be under the charge of a board of seven trustees, at least two of whom shall always be women; during the current year one of said trustees for each of said departments shall be appointed for the term of five years, two for the term of four years, one for the term of three years, two for the term of two years and one for the term of one year, beginning with the first day of May in the year eighteen hundred and ninety-seven; and hereafter in the year in which any term or terms shall expire a trustee or trustees shall be appointed for the term of five years, beginning with the first day of May in the year of appointment; any vacancy occurring among said trustees shall be filled by appointment of a trustee as aforesaid for the remainder of the term. Said trustees shall serve without compensation, but all expenses reasonably incurred by

them in the performance of their duty shall be paid by said city if approved by a recorded vote of the board of which the trustee incurring such expense is a member. They shall organize on the first Monday of May in each year, or as soon thereafter as may be, by the choice of a chairman who shall be one of their number and of a secretary who may or may not, at their discretion, be one of their number. No such trustee, nor any person in the employ of any of said trustees or departments, shall be interested in a private capacity, directly or indirectly, in any contract or agreement for labor or for articles furnished for any of said departments.

SECT. 3. The board of trustees for the Children's Institutions Department shall be known as the trustees for children, and shall have, exercise and perform all the powers and duties relating to children, or to any institution or place in which they are confined or detained or cared for, including the House of Reformation, now conferred by the statutes of this Commonwealth upon the institutions commissioner of the City of Boston, except as to children lawfully committed to or detained in institutions established for the care and custody of the adult insane paupers and criminals.

SECT. 4. The board of trustees for the Pauper Institutions Department shall be known as the pauper institutions trustees, and, except as otherwise provided by section three of this act, shall have, exercise and perform all the powers and duties relating to poor and indigent persons, or to any institution or place in which they are confined or detained or cared for, now conferred by the statutes of this Commonwealth upon the institutions commissioner of the City of Boston.

SECT. 5. The board of trustees for the Insane Hospital Department shall be known as the insane hospital trustees, and shall have the general care and control of the Boston lunatic hospital established by the City of Boston under the provisions of chapter one hundred and thirty-one of the Acts of the year eighteen hundred and thirty-nine, and all other hospitals that said city has established, or may hereafter establish, for the care or treatment of the insane, and the same shall hereafter be known as the Boston Insane Hospital; and said trustees shall have all the powers relating to the insane and to the institutions in which they are confined, conferred by the statutes of the Commonwealth upon the institutions commissioner of the City of Boston.

SECT. 6. The Institutions Department of the City of Boston shall hereafter be styled the Penal Institutions Department, and the institutions commissioner shall hereafter be styled the penal institutions commissioner, and he shall continue to have, exercise and perform all the powers and duties now conferred by the statutes of this Commonwealth upon the institutions commissioner of the City of Boston not conferred by this act

upon any other officer or board of trustees. The penal institutions commissioner may, with the approval of said mayor, appoint one assistant.

SECT. 7. The Institutions Registration Department shall be under the charge of the institutions registrar, who shall investigate all questions relating to the settlement of paupers, to the commitment of the insane, or to the agency for discharged prisoners, or to any rights, duties or liabilities connected therewith, and report thereon to the department interested therein; and shall perform such services relating to the accounts and to the collection, registration and tabulation of statistics relating to said departments, or any of them, as may be required of him by said mayor or by the officer or trustees in charge of any of said departments, with the approval of said mayor. Said registrar shall receive an annual salary of three thousand dollars, or such other salary as may be fixed by ordinance.

SECT. 8. Said mayor shall quarterly, in the months of June, September, December and March, and at such other times and at such places as he shall appoint, hold conferences, at which may be present said penal institutions commissioner, said institutions registrar, two members of each of the aforesaid boards of trustees, to be selected by such boards severally, and two members of the board of overseers of the poor, to be selected by such board, to consider any subjects relating to the work of said departments, or of any two or more of them, or to the co-ordination of such work, and at said conferences said mayor shall preside.

SECT. 9. The City of Boston may take and hold any real or personal property which may be given, granted, bequeathed or devised to and accepted by it for the benefit of any one or more of said departments or of the persons under the care thereof. Such property or the income thereof shall be used, applied and disposed of according to the lawful directions of the donor thereof, by the officers in charge of such department or departments.

SECT. 10. Any officers or employees of the Institutions Department of the City of Boston, whose tenure of office or position may be affected by this act or the carrying out thereof, may be appointed to similar positions in said city at any time within six months of the passage of this act, without civil service examination or enrolment.

SECT. 11. No veteran holding an office in the Institutions Department of the City of Boston shall be removed or suspended, or shall without his consent be transferred from such office or employment, except after a full hearing before the mayor, and at such hearing the veteran shall have the right to be present and to be represented by counsel. Such removal, suspension or transfer shall be made only upon the written order of the mayor.

[Approved May 13, 1897.]

Chapter 393 of the Acts of 1908.

AN ACT TO CHANGE THE NAME OF THE PAUPER INSTITUTIONS
DEPARTMENT IN THE CITY OF BOSTON.*Be it enacted, etc., as follows:*

SECTION 1. The pauper institutions trustees, as established by chapter three hundred and ninety-five of the Acts of the year eighteen hundred and ninety-seven, shall hereafter be known as the Boston infirmary trustees, and the Pauper Institutions Department shall be known as the Boston Infirmary Department.

SECT. 2. This act shall take effect upon its passage.

[Approved April 15, 1908.]



ANNUAL REPORT

OF THE

INSTITUTIONS REGISTRATION DEPARTMENT

FOR THE YEAR 1913-14.

BOSTON, February 2, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— The Institutions Registration Department respectfully submits its seventeenth annual report for the year ending January 31, 1914.

There has been no change in the duties of the department.

Commitments to insane hospitals were as follows:

Boston State Hospital	660
Danvers State Hospital	61
Westborough State Hospital	196
Taunton State Hospital	120
Worcester State Hospital	143
Bridgewater State Hospital	2
Northampton State Hospital	1
Total	<u>1,183</u>

During the year 1,205 persons were sent to the Psychopathic Department of the Boston State Hospital, as follows:

Chapter 504, Acts of 1909, section 43, for observation . . .	32
Chapter 504, Acts of 1909, section 34, on warrant . . .	11
Chapter 504, Acts of 1909, section 42, emergency . . .	10
Chapter 504, Acts of 1909, section 103, under indictment, . . .	1
Chapter 395, Acts of 1911, temporary care . . .	739
Chapter 307, Acts of 1910, sent by police . . .	412
Total	<u>1,205</u>

Of the above 1,205 persons sent to the Psychopathic Department of the Boston State Hospital, 634 were afterwards committed to the various hospitals.

Of the 32 committed for observation, 19 were afterwards committed as insane.

One patient was committed to the Monson State Hospital as a dangerous epileptic.

Sane epileptic patients admitted to the Monson State Hospital numbered 24.

Commitments to the Foxborough State Hospital numbered 61; 40 were committed as inebriates; 21 as drug users.

The commitments of female inebriates numbered 34; drug users, 8.

There were sent to the Relief Station, Haymarket square, 65 persons suffering with delirium tremens.

The examining physicians of the department made 1,357 medical examinations during the year.

REMARKS.

Dr. John A. Horgan of the Out-Patient Department of the Foxborough State Hospital, whose office was formerly at 28 Court square, is now located at 3 Fayette street. Telephone, Oxford 5541.

Voluntary patients for admission should apply there. Hours for examination, 9 a. m. to 12 m., except Sunday and Monday.

The decrease in the number of patients sent to the Relief Station suffering with delirium tremens is accounted for because the Police Department within the year pursued the policy of sending all such persons who came under their care direct to the Relief Station instead of to the City Prison or House of Detention.

This arrangement is a great improvement over the former method, because it means immediate medical attention for the patient.

ADMISSIONS TO ALMSHOUSES.

State Infirmary	2,181
State Farm	64
Boston Almshouse and Hospital, Long Island	1,452
Almshouse, Charlestown	57
Total	<u>3,754</u>

The work performed by the department in relation to the admissions to almshouses cannot be set forth in an annual report. It consists of numerous details such as interviews with the applicants or their relatives or friends, their transportation, treatment, investigation of settlements, etc.

GENERAL INFORMATION.

The physicians attached to this department for the examination of insane are Dr. Charles G. Dewey and Dr. William H. Prescott.

Office, 28 Court square. Hours, 10.30 to 12 o'clock.

Doctor Dewey's home address, 44 Alban street, Dorchester. Telephone, Dorchester 201.

Doctor Prescott's home address, 330 Hyde Park avenue, Jamaica Plain. Telephone, Jamaica 1370.

Application for commitment of insane is made by an official of this department to the judges of the Probate Court.

The law relating to the commitment of the insane is contained in chapter 504, Acts of 1909.

Patients are sent to the following public hospitals: Boston State Hospital, Worcester State Hospital, Taunton State Hospital, Danvers State Hospital, Westborough State Hospital, Foxborough State Hospital and Monson State Hospital.

Foxborough State Hospital is for dipsomaniacs or inebriates, and those who are so addicted to the intemperate use of narcotics or stimulants as to have lost the power of self control.

Monson State Hospital is for epileptic patients, sane and insane.

Before sending a patient to a private hospital arrangements should be made with that hospital for receiving the patient.

Patients are sent to the Boston State Hospital according to the following rules made by the State Board of Insanity:

First.— Only those patients who have been residents of Boston for ten years or more, and of such persons only those who have relatives actively interested in them and who will visit them frequently.

Second.— Other insane persons, only in emergency, whose condition does not permit the delay and exhaustion incident to the commitment to a distant state hospital.

The question of payment of patient's board has no bearing on this rule.

No person shall be committed to a hospital for the insane, public or private, unless he has been an inhabitant of the Commonwealth for six months immediately preceding the application for commitment, or provision has been made for his maintenance satisfactory to the State Board of Insanity, or by reason of insanity he would be dangerous if at large.

Commitment forms may be had by applying at the office of the Institutions Registration Department, 28 Court square, or at the office of the State Board of Insanity, Room 36, State House.

Hearings for commitment of insane are held by the judges of the Probate Court, Courthouse, Pemberton square, at twelve o'clock every day except Saturdays and legal holidays.

This rule may be somewhat modified during the months of July and August, vacation time.

When application for commitment is made it is desirable that the committing physician notify a relative of the patient (the nearest one when possible) to apply at the office of the Institutions Registration Department in order to give the necessary information required.

Arrangements for payment of board should be made with the superintendent of the hospital to which the patient is sent.

In order to be committed from Boston to a hospital for the insane the patient must reside or be in this county.

When a woman is sent to a hospital, unless accompanied by her father, husband, brother or son, one of the attendants accompanying her must be a woman.

Patients are taken to the hospitals by an official designated for that purpose, and they are taken in such a manner as to avoid all publicity.

FINANCIAL STATEMENT.

The total amount of the appropriation was \$23,500;
amount expended, \$23,250.01.

Respectfully submitted,

CHARLES F. GAYNOR,
Institutions Registrar.

TOTAL EXPENDITURES FOR THE YEAR.

Salaries	\$15,470 93
Medical attendance	3,894 00
Transportation	1,111 50
Horsekeeping	1,843 35
Printing	315 18
Office expenses	10 90
Postage	60 53
Telephone	270 72
Food	37 75
Stationery	80 30
Newspapers, etc.	24 50
Messenger service	11 75
Car fare	117 00
Miscellaneous	1 60
Total	<u>\$23,250 01</u>

Investigations of Settlements, etc., Medical Examinations and Commitments of Insane, Epileptics and Inebriates,
Admissions to Almshouses, 1913-14.

DURING THE WEEK ENDING	Settlements Investigated for Trustees for Children.	Medical Examinations.	ADMISSIONS TO ALMSHOUSES.				COMMITMENTS.										GRAND TOTALS.					
			State Infirmary, Tewksbury.	Almshouse, Long Island.	Almshouse, Charles- town.	Totals.	Relief Hospital.	Psychopathic Department.	Boston State Hospital.	Danvers State Hospital.	Westborough State Hospital.	Taunton State Hospital.	Worcester State Hospital.	Foxborough State Hospital.	Monson State Hospital.	Bridgewater State Hospital.		Northampton State Hospital.	Totals.	Admissions and Commitments.	Settlements Investigated.	
1913.																						
February	1.	7	7	4	2	11	1	7	2	17	3	8	3	1	1	1	1	1	19	27		
	8.	22	58	35	1	95	1	27	2	3	8	1	1	3	1	1	1	51	146	192		
	15.	33	33	29	1	83	1	29	1	1	8	2	9	1	1	1	1	42	159	125		
March	22.	11	17	34	29	63	1	28	1	1	6	2	8	1	1	1	1	41	104	142		
	1.	33	42	22	1	64	2	32	6	2	2	2	7	2	1	1	1	48	112	144		
	8.	28	35	27	1	62	2	31	1	2	2	8	2	7	2	1	1	47	109	146		
	15.	12	36	17	1	53	2	31	1	2	2	8	2	7	2	1	1	44	109	146		
	22.	23	40	28	1	68	2	28	1	1	3	3	3	2	2	1	1	47	131	161		
	29.	13	38	28	1	66	2	36	1	1	6	2	8	2	2	1	1	41	109	136		
April	5.	10	52	35	2	81	2	39	1	1	9	3	3	2	2	1	1	45	111	142		
	12.	31	26	27	1	66	2	36	1	1	6	2	8	2	2	1	1	45	111	142		
	19.	28	40	30	2	70	1	32	2	1	4	4	6	3	3	2	2	42	120	161		
May	26.	11	29	23	2	49	2	32	2	1	4	4	6	3	3	2	2	71	152	182		
	3.	6	40	30	1	70	1	31	1	1	3	3	11	6	3	3	1	50	99	126		
	10.	11	27	24	22	47	3	34	10	1	3	3	11	2	3	1	1	49	119	146		
	17.	23	26	22	1	53	1	32	4	1	3	6	2	2	1	1	1	54	101	126		
	24.	8	41	20	3	64	1	20	8	3	4	1	6	2	1	1	1	49	102	134		
	31.	12	43	27	1	70	1	30	9	1	2	4	1	5	1	1	1	37	101	136		
June	7.	28	32	26	1	53	3	24	4	3	11	1	1	1	2	2	1	48	118	171		
	14.	5	22	33	3	62	3	35	2	1	9	1	1	6	1	1	1	51	104	135		
	21.	11	28	26	8	56	5	26	5	2	9	3	3	9	1	1	1	50	112	139		
	28.	9	30	35	4	63	1	36	8	2	1	9	1	7	1	1	1	47	103	131		
	28.	9	38	27	4	79	1	37	8	2	1	8	2	7	1	1	1	53	116	134		
	28.	9	45	27	4	79	1	37	8	8	1	8	2	7	1	1	1	57	136	166		

July	5.....	12	22	22	22	22	22	44	2	31	6	1	2	5	1	13	1	1	57	101	131
	12.....	7	32	32	30	30	30	62	3	22	6	6	5	5	5	1	1	1	39	101	124
	19.....	9	41	41	22	22	22	63	3	41	5	5	5	5	5	10	1	1	61	124	156
	26.....	6	33	44	23	33	33	67	1	36	3	3	3	11	11	1	1	1	52	119	141
August	2.....	9	29	31	33	33	33	65	1	32	6	6	14	14	2	2	1	1	57	122	162
	9.....	13	33	30	24	3	3	57	3	28	7	7	7	7	2	2	6	1	47	104	146
	16.....	7	15	36	21	57	57	67	3	34	2	2	2	2	1	1	8	1	38	95	124
	23.....	8	25	36	31	31	31	67	6	27	2	2	3	1	1	6	3	1	39	100	131
September	30.....	11	37	37	19	31	31	56	1	30	2	2	3	8	8	3	1	1	44	100	134
	6.....	9	27	42	15	1	1	71	1	26	4	1	8	8	1	2	1	1	41	99	122
	13.....	21	47	24	24	24	24	69	2	33	1	1	5	5	1	2	2	1	49	120	162
	20.....	8	28	37	33	33	33	71	1	36	6	6	2	3	3	3	1	1	42	111	142
October	27.....	12	27	36	30	30	30	66	4	35	4	2	3	3	3	3	1	1	46	117	147
	4.....	11	37	31	31	31	31	71	2	35	5	2	3	3	3	3	1	1	53	119	151
	11.....	18	23	33	33	33	33	62	2	41	4	2	1	10	10	8	1	1	61	123	162
	18.....	8	25	45	28	30	30	77	1	28	8	1	1	1	1	1	1	1	42	90	122
November	25.....	13	35	46	30	30	30	77	3	25	7	1	1	13	13	9	2	1	45	122	156
	2.....	11	30	37	35	35	35	77	2	32	8	2	2	2	2	4	4	1	61	138	172
	8.....	3	22	44	29	29	29	77	4	32	2	1	3	3	3	4	1	1	52	124	164
	15.....	6	22	49	33	33	33	89	2	38	3	3	3	4	4	5	2	1	42	119	142
December	22.....	11	19	49	33	33	33	89	80	32	1	3	1	1	5	5	1	1	45	125	167
	29.....	7	22	55	37	37	37	94	1	28	2	2	3	1	5	5	1	1	36	125	149
	6.....	12	21	56	44	44	44	119	1	34	6	1	11	11	9	9	3	1	57	151	185
	13.....	14	35	64	34	34	34	98	1	38	2	3	2	2	9	9	1	1	47	166	206
Totals	524	1,357	* 2,245	1,452	57	3,754	65	† 1,669	196	61	196	120	143	61	24	2	1	2,538	6,292	7,994	

† Includes admissions and commitments.

*Included in this number are 64 persons admitted to State Farm, Bridgewater.



ANNUAL REPORT
OF THE
LAW DEPARTMENT
FOR THE YEAR 1913-14.

BOSTON, February 2, 1914.

To his Honor the Mayor:

I respectfully submit herewith a report of the Law Department of the city for the year ending January 31, 1914.

Under the ordinance concerning the Law Department the character of the business of the department must necessarily remain the same from year to year. However, the work has been extended during the past year from its essentially civil nature to include appearance for the prosecution in criminal proceedings to enforce the building and health laws applicable to the city in the lower criminal court.

It is to be noted further that the field for the activities of this department must soon be broadened with the acceptance of chapter 807 of the Acts of the year 1913, extending the Workingmen's Compensation Act to the laborers, workmen and mechanics of the city. The work of carrying out the purposes of this act should be under the direction of the Law Department.

During the past year there has been a substantial increase in the number of opinions, both oral and written, given on matters of municipal concern; in the number of

tax bills and other bills due the city referred to this department by the City Collector and collected by legal process; and in the number of examinations of titles to real estate transferred to and from the city for various municipal purposes.

Boston has long borne the entire expense of Suffolk County and the whole cost of the construction and maintenance of the Chelsea Bridge and the Meridian Street Bridge.

A bill was introduced in the Legislature of last year seeking the apportionment of some part of the finances and expenses of Suffolk County to the city of Chelsea and the towns of Revere and Winthrop, and a statute was enacted as chapter 470 of the Acts of 1913. A commission was appointed, held hearings during the past summer, and has filed its report recommending that Chelsea, Revere and Winthrop should contribute to the support of the county.

A commission was also appointed in 1913 to apportion the cost of the reconstruction, repair and maintenance of Chelsea Bridge, so called, both north and south draws, and of the Meridian Street Bridge among the cities and towns receiving special benefits, has held hearings and should make its report during the ensuing year.

The volume of legislation directly or indirectly affecting the City of Boston continues to increase with each annual session of the Legislature. Last year the Corporation Counsel presented argument on over four hundred different bills; and the Law Department was called upon to examine and study many hundred more.

This year a bill was introduced to authorize the City of Boston to file petitions to have damages assessed by a jury for the taking of, or injury to, real estate. It is the last of a set of acts of constructive legislation relating to land damages which experience has shown are of essential consequence to the interests of the city, and of which three were enacted last year, namely: One providing for the speedy trial of land damage cases, another limiting the interest on such damages to 4 per cent, and the third making the assessed value of an estate evidence in the trial of such cases to show the market value of the land taken.

As the law now stands a petitioner for land damages may delay his proceedings from one to two years by declining to bring suit. The principle of the bill of this

year is to grant to the city the same privilege now enjoyed by a land owner to have damages determined contemporaneously with the taking of the land. It accomplishes in fact what the law lays down in theory, namely, that damages for land taken by right of eminent domain are to be determined and paid for as of the time of taking.

These acts alone should save the City of Boston a large sum of money in each year. As a result of the justice of the legislation entitling the city to say—accept a fair settlement or proceed to trial forthwith,—many petitions brought for damages arising out of the widening of Pleasant street were dismissed without trial and the awards of the Street Commissioners were accepted.

Among other acts of the year 1913, based upon bills drawn by this department, are to be noted an amendment perfecting the law relative to the Laborers' Retirement Fund, an act to establish a free employment office for minors, an act to establish an agricultural school, and an act to put the Cemetery Department upon a self-supporting basis without annual appropriations.

Reference to the index of the Acts of 1913 shows the enactment of a large number of measures affecting the conduct of the executive and administrative business of the city and the health and safety of its citizens.

A state tax of \$10,000,000 is imminent. This would add \$658,000 to the \$2,600,000 state tax which Boston nows pays and would increase the tax rate of the city 45 cents. Boston now pays over \$3,000,000 in various metropolitan assessments.

Many bills before the Legislature of 1913, as well as those before the present Legislature of 1914, seek increased state, county, city and metropolitan expenditures. These measures should be vigorously opposed, unless of pressing public importance.

The amount of trial work of the office continues to increase. At the opening of the session of the Superior Court for Suffolk County on October 6, 1913, there were 379 actions against the City of Boston on the jury trial list alone. To date, 184 of these cases have been disposed of. A full statement of the cases in court and of building law complaints, including court proceedings, on the dockets of this office for the past year, is given in the table below.

As a result of the successful trials of the first few

petitions arising out of the Cambridge Connection or Beacon Hill Tunnel, a fair and satisfactory basis of settlement was established upon which nearly all of the remaining suits have been settled.

All of the cases brought for damages by reason of the construction of the East Boston Tunnel in State street have been disposed of. There remain also only a few of such cases for injury to property on account of the construction of the Washington Street Tunnel.

The following table shows the number of cases pending in the courts at the beginning of the year, cases since brought and those disposed of during the year and those pending February 1, 1914, and also shows building law complaints, including court proceedings, classified according to the subject matter. This list does not include the numerous cases in which the city was summoned as trustee, nor the cases which have been and are being handled in the office, but in which no suit has been brought:

SUBJECT.	Pending January 31, 1913.	Since Brought.	Disposed of During Year.	Pending January 31, 1914.
Assessments, taxes, etc.....	127	59	68	118
Building law complaints, including court proceedings.....	238	815	570	483
Damages for land takings, gradings, etc..	255	135	178	212
Injuries by street defects, negligence, etc.	157	164	166	155
Damage by overflow of sewers, water pipes, etc.....	128	22	30	120
Miscellaneous.....	189	92	95	186
Totals.....	1,094	1,287	1,107	1,274

The pay roll of the department as now composed, with the present annual compensation and date of appointment, is as follows:

NAME.	Office.	Salary.	Date of Appointment.
Joseph J. Corbett.....	Corporation Counsel.....	\$9,000	March 26, 1912
George A. Flynn.....	Assistant Corporation Counsel..	4,500	July 15, 1904
Joseph P. Lyons.....	Assistant Corporation Counsel..	3,800	April 15, 1912
Karl Adams.....	Assistant Corporation Counsel..	3,600	March 1, 1908
Joseph A. Campbell.....	Assistant Corporation Counsel..	3,600	March 1, 1909
William P. Higgins.....	Assistant Corporation Counsel..	3,300	Aug. 1, 1910
Richard M. Walsh.....	Assistant Corporation Counsel..	2,800	Oct. 2, 1911
Edward T. McGettrick....	Assistant Corporation Counsel..	2,300	April 15, 1912
Charles F. Day.....	Conveyancer.....	4,000	July 3, 1880
Roscoe P. Owen.....	Conveyancer.....	4,000	July 4, 1881
Elizabeth M. Taylor.....	Conveyancer.....	2,400	July 1, 1900
Fisher Ames.....	Secretary.....	2,200	May 16, 1866
Nina F. Bachelor.....	Stenographer and Law Clerk....	1,400	Oct. 22, 1906
Daniel B. Carmody.....	Messenger.....	920	April 1, 1894
Harry Connolly.....	Telephone Boy.....	420	Sept. 7, 1909
Arthur G. Fogarty.....	Telephone Boy.....	360	Oct. 27, 1910

The Law Department has no income or receipts. The appropriation for the year was \$51,000.

The expenditures of the department amounted to \$49,507.59, leaving a balance of \$1,492.41.

The department has no property other than the customary books, stationery and fittings of a law office.

Respectfully submitted,

JOSEPH J. CORBETT,
Corporation Counsel.



ANNUAL REPORT
OF THE
LIBRARY DEPARTMENT
FOR THE YEAR 1913-14.

Boston, February 2, 1914.

TO HIS HONOR JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— The Board of Trustees of the Public Library of the City of Boston present the following report of its condition and affairs for the year ending January 31, 1914, being their sixty-second annual report.

ORGANIZATION OF THE BOARD.

The Board organized on May 5, 1913, by the election of Josiah H. Benton as president, William F. Kenney, vice president, and Della Jean Deery, clerk.

Samuel Carr, a member of the Board, was reappointed, and qualified for the term ending April 30, 1918.

RECEIPTS OF THE LIBRARY.

The receipts of the library are of two classes: First, those which are to be expended by the trustees in the maintenance of the library. These consist of the annual appropriation by the City Council and the income from

trust funds given to the trustees but invested by the City Treasurer under the direction of the Finance Committee of the city. During the past year these receipts were as follows:

Annual appropriation	\$380,000 00
Income from trust funds	18,277 13
Unexpended balance of trust fund income of previous years	18,632 19
Total	<u>\$416,909 32</u>

Second, receipts which are accounted for and paid into the city treasury for general municipal purposes. These consist of receipts from fines for the detention of books; from sales of finding lists, bulletins and catalogues; from commissions paid for the use of telephone facilities; from sales of waste; from payments for lost books; and from money found in the library. These receipts, during the year, have been as follows:

From fines	\$6,099 81
From sales of catalogues, etc.	67 52
From telephone commissions	227 10
From sales of waste	94 88
From payments for lost books	399 27
From money found in the library	14 64
Total	<u>\$6,903 22</u>

The \$399.27 received for lost books, being received only to replace lost library property, is, when paid into the city treasury, added to the appropriation for library maintenance. A balance sheet showing all the receipts and expenditures of the Library Department in detail is hereinafter contained.

CITY APPROPRIATION.

Nearly all the money which the trustees can use for the maintenance and working of the library system comes from the annual appropriation by the City Council.

During the past ten years the estimates of the trustees, the recommendations by the Mayor and the amounts appropriated by the City Council have been as follows:



CENTRAL LIBRARY BUILDING.

	Estimates of Trustees.	Amounts Recommended by Mayor.	Amounts Appropriated by City Council.
1904.....	\$320,414 00	\$300,000 00	\$305,000 00
1905.....	325,465 00	310,000 00	310,000 00
1906.....	324,550 00	320,000 00	324,550 00
1907.....	326,100 00	325,000 00	325,000 00
1908.....	332,800 00	325,000 00	310,000 00
1909.....	335,200 00	335,200 00	349,455 00
1910.....	351,978 00	351,978 00	351,978 00
1911.....	359,497 00	355,200 00	355,200 00
1912.....	374,665 00	367,165 00	367,165 00
1913.....	399,996 00	380,000 00	380,000 00

The appropriations for these ten years have averaged \$6,431 less than the estimates of the Board. In 1906 and 1910 the appropriations equaled the estimates, but in 1913 the appropriation was \$11,996 less than the estimate. This is not said by way of complaint, because we are aware of the limitations which necessarily govern the Council in making appropriations for maintenance. It is only stated to dispell the illusion which the Examining Committee and many others seem to have that the trustees have only to ask for money to get it.

HOURS OF SERVICE.

The Central Library and the branches open and their work begins at nine o'clock in the morning. The reading-room stations open in the afternoon at varying hours, most of them at two o'clock. The service continues until ten o'clock at night at the Central Library building and at the West End Branch, and until nine at the other branches and reading-room stations except during the summer months. From June 15 until September 15 the Central Library and West End Branch are closed at nine o'clock. The other branches and reading rooms during a shorter period close earlier than in winter, most of them at six o'clock. The Central Library is in operation 102 week days of twelve hours each, 203 week days of thirteen hours each, 17 Sundays of nine hours each, and 35 Sundays and two holidays of ten hours each, making an aggregate of 359 days, 4,680 hours, during each twelve months.

The Sunday service as now arranged includes the Central Library and the West End Branch throughout the year. All the other branches (except the West Roxbury Branch, which has no Sunday service) and the eight largest reading rooms provide Sunday service from November 1 to May 1 only. The hours are as follows:

At the Central Library and West End Branch, from twelve o'clock to ten o'clock, except that the closing hour is nine o'clock from June 15 until September 15. At the South End Branch, from twelve o'clock to nine o'clock. At the other branches and at the eight largest reading rooms (namely, Allston, Codman Square, Broadway Extension, Warren Street, Roxbury Crossing, Boylston Station, City Point, Parker Hill), from two o'clock to nine o'clock. At all of these reading rooms, except Codman Square, the room is closed from six to seven o'clock.

The total number of hours of Sunday service provided annually at the Central Library and at the West End Branch is 507 each; at the South End Branch, 234 hours; at the other branches and at the Codman Square Reading Room, 182 hours each; and at the following reading rooms, Allston, Broadway Extension, Warren Street, Roxbury Crossing, Boylston Station, City Point, Parker Hill, 156 hours each.

ADDITIONS TO THE LIBRARY.

During the year 37,606 volumes have been added to the library collection, as compared with 35,538 added in 1912. Of these, 27,316 were purchased, 6,855 were given to the library, and the remainder were received by exchange, binding of periodicals into volumes, etc. There were purchased for the Central Library 11,860 volumes and 15,466 for the branch libraries and reading-room stations.

The total amount expended for books, including \$7,452.72 for periodicals, \$2,000 for newspapers and \$823.36 for photographs, was \$49,094.70, or about 12.3 per cent of the entire expense of the library for all purposes.

The corresponding expenditure for the year 1912 was \$50,264.51, including \$7,133.18 for periodicals, \$2,000 for newspapers and \$1,022.19 for photographs, or about 13.6 per cent of the entire expense of the library.

The average cost of all books purchased was \$1.42 per volume, as against \$1.50 in 1912. Of the books purchased, 22,445 were bought from money appropriated by the city, at an average cost of \$1.02 a volume, and 4,871 were bought with the income of trust funds, at an average cost of \$3.23 a volume. The corresponding figures for 1912 were: Bought from city appropriation, 20,087; average cost \$1.18. From trust funds income, 4,687; average cost, \$3.27.

BOOK CIRCULATION AND USE OF THE LIBRARY.

There were issued during the year for direct home use 260,965 volumes at the Central Library, compared with 264,507 issued in 1912, and from the Central Library through the branches and reading-room stations 82,782 others, while the branches and reading-room stations also issued 1,300,348 volumes for direct home use. The corresponding figures in 1912 were 77,325 and 1,211,310. There were also issued from the Central Library, branches and reading-room stations, for use at schools and institutions, 204,878 volumes, as against 191,736 issued in 1912, making the entire issue for use outside the library buildings 1,848,973 volumes, as compared with 1,744,878 in 1912.

The use of the library for general reference and study is unrestricted. It is therefore impracticable to record this use statistically. Its extent, however, is shown by the fact that about half a million call slips for the table use of books in Bates Hall in the Central Library alone are required during the year. The daily use of books and other library material in the Central Library and in the branches is doubtless many times greater than the home use of books drawn out upon cards.

BINDING AND REPAIR OF BOOKS.

During the year 38,530 volumes have been bound in the bindery, as against 42,492 in 1912. Beside this, a large amount of miscellaneous work has been completed, such as the folding, stitching and trimming of 183,423 library publications, compared with 154,451 in 1912, and the mounting of maps and photographs, the repairing of books, the making of periodical covers, etc. The expense of performing this necessary miscellaneous work is equivalent to about 17 per cent of the total expense of the department. The ability to

do it promptly in our own bindery greatly promotes the convenience, economy and efficiency of the library work.

LIBRARY COOPERATION WITH SCHOOLS, ETC.

The trustees continue to cooperate with the educational work of the schools, and during the past year the library has supplied with books 28 branches and reading rooms, 139 public and parochial schools, 62 engine houses and 36 other institutions, and sends out upon the average from the Central Library about 414 volumes every day by its delivery wagons. The number of volumes sent on deposit from the Central Library through the branch system was 53,361, of which 10,533 were sent to schools. There were also sent from the branches themselves and from two of the largest reading rooms 44,217 volumes on deposit, distributed among 157 places. Of these, 18,148 were sent to schools. That is to say, not only is the collection of the Central Library used as a reservoir from which books may be drawn for use in the branches and reading rooms, but each of the branches and reading rooms is in itself a reservoir from which books are drawn for use by teachers in schools in its immediate vicinity.

NORTH END BRANCH.

The new North End Branch building, fully described in our report last year, was opened February 27, 1913. The enlargement of the privileges of the library, made possible by the completion of this well arranged building, is much appreciated by the public in this congested district of the city.

The Dante Memorial bas-relief and tablet, the work of Luciano Campise, sculptor, given to the city by the Boston Branch of the Società Dante Alighieri, as noted in our last report, was placed on the north wall of the reading room for adults, and was unveiled, with suitable ceremonies, on Sunday, June 14, 1913.

During the winter a course of free talks on vocational subjects has been given in the Lecture Hall by competent speakers, and, in cooperation with the Società Dante Alighieri, a course of five free lectures in Italian, with stereopticon, has been given by Signorina Amy A. Bernardy.



NEW CHARLESTOWN BRANCH LIBRARY.

CHARLESTOWN BRANCH.

The new building for the Charlestown Branch, corner of Monument square and Monument avenue, which was put under contract in July, 1912, has been completed, and was opened to public use November 14, 1913.

The building is of brick, with architectural features of Indiana limestone. The principal entrances are on Monument square, one opening to the children's reading room, 36 feet by 75 feet in size, on the first floor, the other leading to the reading room for adults, of the same size, on the second floor. The high basement contains a lecture room, with a separate entrance from Monument avenue. This room is provided with 240 chairs, and is to be devoted to class work, lectures and other public uses appropriate to the library. In the basement are also storerooms, a lunch room for the staff, heating apparatus and fuel rooms. In the arrangement of the building and in its fittings every provision has been made for the effective operation of the branch as a modern public library. The books are arranged on open shelves, so that the public may have direct access to them without formality. The interior finish and furnishings are of oak, the stairs of marble, and incombustible construction has been used throughout. The architects were Fox & Gale, and the contractors McGahey & O'Connor. The appropriation for building, site and furnishings was \$72,200, and the expenditures to date are as follows:

Site (including building thereon and brokerage)	\$15,150 00
Payments on contract	39,981 00
Architects' commission, on account	2,243 17
Furniture and fixtures	3,306 56
Advertising and minor items	23 46
Total	<u>\$60,704 19</u>

The amount remaining unexpended, \$11,495.81, is required to complete final payments on contract.

EAST BOSTON BRANCH.

The site for this building, 276-282 Meridian street, with the buildings thereon, selected by the trustees January 28, was approved by his Honor the Mayor January 31, and on the 19th of April proposals were

solicited, by advertisement, upon plans prepared by James E. McLaughlin, architect. The following proposals were received:

John F. Griffin Company	\$65,394 00
A. Varnerin Company	67,857 00
Connors Brothers Company	68,079 00
J. E. Locatelli Company, Inc.	71,193 00
McGahey & O'Connor	73,075 00
George A. Cahill	73,313 00
Patrick Rich	75,875 00
Whiton & Haynes Company	78,300 00
Mack Brothers	80,565 00
Joseph Slotnik	83,500 00
Hapgood, Frost Company	86,786 00

The John F. Griffin Company were the lowest bidders; their proposal was accepted, and a contract made with them for the construction of the building. It will be completed early in the spring, and the East Boston Branch will then be operated in a structure properly arranged for its important work.

The appropriation for this building, including site and furnishings, is \$100,000. The expenditures to date have been as follows:

Cost of site, including brokerage	\$20,500 00
Payments on contract	32,355 25
Architect's commission, on account	2,932 48
Advertising	3 90
Total	<u>\$55,791 63</u>

The unexpended balance of appropriation, \$44,208.37, is sufficient to meet the remaining contract obligations and the expense of furnishings.

CITY POINT READING ROOM.

This reading room was removed to the new quarters provided for it in the new municipal building on the Perkins Institution lot on Broadway, and opened to the public there on January 21, 1914.

The arrangements for the reading room in this building are excellent. A separate entrance is provided, apart from other departments in the building, the floor space is adequate to our present requirements, and the furnishings are in every way adapted to our needs.



NEW CITY POINT READING ROOM, SOUTH BOSTON.

BROADWAY EXTENSION, MT. PLEASANT AND ROSLINDALE READING ROOMS.

Provision has been made for these reading rooms in new municipal buildings in process of erection. For all of them the requirements of the library have been met, and when the buildings are completed the reading rooms will be provided with rooms adequate to their needs and far superior to the leased premises heretofore occupied.

ANDREW SQUARE AND FANEUIL READING ROOMS.

The City Council, at the suggestion and with the approval of the Mayor, has authorized the establishment of reading rooms in the Andrew square district of South Boston and in the Faneuil district of Brighton. For establishing each reading room an appropriation of \$3,500 was made by the Council, and arrangements are now going forward for opening these rooms as soon as the premises selected for them have been made ready. The Andrew Square Reading Room will be established in the Nolen Building, 392-394 Dorchester street, and the Faneuil Reading Room in a building on Brooks street formerly known as the Brooks Street Chapel. These buildings are centrally located with reference to the population of the districts, and will provide suitable and convenient quarters for our purpose. The rental of the reading room in Andrew square is \$780 a year, and the rental of the reading room on Brooks street is \$650 a year, each exclusive of heating and care. These rentals and the expenses of heating and care do not come out of the \$7,000 appropriation for establishing the rooms, but must be paid from the general maintenance fund of the library.

As we have frequently stated, after the appropriations for establishing such reading rooms as these are exhausted the annual expense of operating them must be borne by the general appropriation for the library, which is constantly increasing by reason of factors over which the trustees have no control.

BEQUEST OF MEHITABLE C. C. WILSON.

The library received on October 10, 1913, notice of a bequest under the will of Mehitable C. C. Wilson of Cambridge, amounting to \$1,000. Of this sum, \$866.13, being 78 per cent of the total, with interest at 6 per

cent for one year, has been paid to the trustees and sent to the City Treasurer to be funded as the "Mehitable C. C. Wilson Fund," for the purchase of books.

ESTIMATES FOR 1914.

The estimates of the amount required for the maintenance of the library during the coming year, sent in as required by city ordinance, amount to \$430,619. This is an increase of a little more than 13 per cent over the estimated expenditures of the present year. But the amount that was appropriated by the Council last year was \$11,996, or about 3 per cent, less than the trustees asked for, and was not sufficient to enable the library to be operated to the point of highest efficiency. Even in the upkeep of the plant we were obliged to defer certain repairs which would have been carried out if the funds at our command had permitted.

In the estimates presented the following specific increases are provided for:

1. In the Printing Department, \$2,000 to meet the second payment on account of new linotype machines acquired in 1912. This is in the nature of a capital expenditure, not current maintenance, and is imperative.

2. Under the head of repairs, \$800 has been included for extensive repairs of the wiring system at the Central Library to meet the requirements of the Wire Department of the city. This wiring, chiefly for table and bookcase lighting in certain reading rooms, was put in some time ago, and does not conform to modern methods. This expenditure is imperative.

3. An allowance of \$9,764, about $3\frac{1}{2}$ per cent of the present authorized salary schedule, is included to meet changes in trade union scale to employees affected thereby, and to provide for other equitable salary increases during the year. No other allowance is made for individual salary increases above the schedule now fixed as shown in the detailed estimate sheets.

There are in the regular service of the library 320 persons and those required in the Sunday and evening and extra service raise the total number of persons who must be paid to 573. This number has been and will be increased during the coming year by about 25, at an estimated increase in expense of about \$15,000. This gives about \$600 a year or about \$12 a week for this additional service. It surely is not too much. About \$23,000 is estimated to be required for other necessary expenses, caused largely by the opening of

new branch buildings and stations requiring additional expense for fuel, light, cleaning, transportation, and the proper care of the enlarged buildings, with many other minor items. It will all be required in our judgment for the proper maintenance of the library during the coming year. This is not an unreasonable burden upon the tax levy. The expense of the whole library system last year was only 25 cents of the \$17.20 of the tax levy. This increase asked for this year is only $3\frac{1}{4}$ cents of the tax levy, which will make the total expense of running the library about 28 cents of the tax rate.

THE NEED OF ADDITIONAL BOOKS FOR BRANCH USE.

We desire to call attention to the immediate and imperative necessity of an appropriation for additional copies of standard books for the branches and for the deposit collection of the branches. We find it impossible to satisfy the reasonable demands of the public with the present supply of such books. This matter we shall deal with in a communication to your Honor early in the coming year. We wish now to say that it is a need which is imperative and as to which something must be done.

RETIREMENT OF EMPLOYEES.

We repeat our previous recommendations for some provision which will enable the trustees to retire employees who become worn out in the service of the library. The Examining Committee in 1910 said in its report, "It is manifestly impossible for persons receiving such rates of compensation to create and maintain any adequate fund to which resort can be had in the emergencies of life which confront or are likely to confront them." In this statement, as we then said, we entirely concur, and we wish again to press earnestly upon the consideration of the city government and of the people of the city the importance, not only from humanitarian but also from business considerations, of some provision which will render it unnecessary to retain in our service those who have been worn out by years of work in it. Their retirement, with suitable provision for their proper support, is demanded, not only because it is humane but because it is for the best business interests of the city.

There is a means at hand which could easily be used, and would in our judgment be sufficient for this purpose. The fines which are imposed and collected by the library upon overdue books and are now paid into the city

treasury amount to about \$6,000 each year. If this sum, which is really an income that the library creates by imposing fines and collecting them in small sums, could be placed at the disposal of the trustees to be expended in their discretion in the retirement of superannuated employees, we think it would accomplish our purpose.

TRUST FUNDS.

The trust funds, that is, property given to the trustees in trust for the uses of the library, are by law required to be invested by the City Treasurer under the direction of the Finance Committee of the city.

A detailed statement of these funds and the income therefrom is contained in the report of the City Auditor, but a condensed statement of the funds is as follows:

Artz Fund	\$10,000 00
Bates Fund	50,000 00
Bigelow Fund	1,000 00
Robert Charles Billings Fund	100,000 00
Bowditch Fund	10,000 00
Bradlee Fund	1,000 00
Joseph H. Center Fund	39,543 14
Henry Sargent Codman Memorial Fund	2,854 41
Cutter Fund	4,000 00
"Elizabeth Fund" under Matchett will	25,000 00
Daniel Sharp Ford Fund	6,000 00
Franklin Club Fund	1,000 00
Green Fund	2,000 00
Charlotte Harris Fund	10,000 00
Thomas B. Harris Fund	1,000 00
Abbott Lawrence Fund	10,000 00
Edward Lawrence Fund	500 00
Mrs. John A. Lewis Fund	5,000 00
Charles Greely Loring Memorial Fund	500 00
Charles Mead Fund	2,500 00
John Boyle O'Reilly Fund	1,000 00
Phillips Fund	30,000 00
Pierce Fund	5,000 00
Scholfield Fund	61,800 00
South Boston Branch Library Trust Fund	100 00
Ticknor Fund	4,000 00
William C. Todd Newspaper Fund	50,000 00
Townsend Fund	4,000 00
Treadwell Fund	13,987 69
Nathan A. Tufts Fund	10,131 77
Twentieth Regiment Memorial Fund	5,000 00
Alice Lincoln Whitney Fund	1,825 98
Total	<u>\$468,742 99</u>

The income of these trust funds is used only for the purchase of books, and the income of \$154,533 can be used only for books in special classes of literature or to be placed in certain designated branches or departments of the library. The income of \$121,750 must be spent for books designated as of "permanent value" only. The income of only \$192,500 is unrestricted.

Besides the amount enumerated the trustees have received and paid to the City Treasurer the sum of \$2,314.79 under a bequest of James L. Whitney, formerly librarian, to be held and used for bibliographical purposes; and, from the same source, the sum of \$765.43 to be added to the amount of the Alice Lincoln Whitney Fund, which is included in the foregoing statement. They have also received and paid to the City Treasurer, as previously herein noted, the sum of \$866.13, part payment of the principal of the Mehitable C. C. Wilson Fund.

The City Treasurer also holds \$399.54, unexpended balance of the Patrick F. Sullivan bequest of \$5,000, to be used for the purchase of standard Catholic books under the terms of Mr. Sullivan's will.

PUBLIC TOILET ROOMS AT THE CENTRAL LIBRARY.

The position of the public toilet rooms at the Central Library is open to just criticism. When the new building was built these rooms were placed on the principal floor, side by side, opening from the main corridor. It was soon found impossible to operate them properly in that prominent position, and they were removed to the rear part of the building, the entrance being through the courtyard arcade. The room for men is in the basement and that for women on the first floor, but the approaches are in common, and the rooms themselves are not as large or as well adapted to their purpose as they should be.

The proper care of these toilet rooms has always been complicated by the resort to them of persons who are not patrons of the library. There is no public comfort station near Copley square, as there should be, and during certain hours of the day the general public use of the library toilet conveniences is embarrassing to those for whom these rooms were especially intended. The difficulty continually increases, and it is imperative that something be done to overcome it.

It would be possible to place toilet rooms in the basement in a better location and to separate the approaches

entirely, to equip the rooms with modern fittings of a better type than now in use, and to subject them to closer supervision. We regard this matter as urgent and requiring immediate attention. It would involve an expenditure of at least \$10,000, according to an estimate obtained by the trustees some time ago. It is plain that this rearrangement cannot be carried out unless the expense is provided for by special appropriation.

ANNUAL INVENTORY.

An annual inventory is made at the end of each year of the personal property of the library, except books and other material shown on the catalogue or included in the catalogue shelf list.

EXAMINING COMMITTEE.

As required by the city ordinance, we appointed an Examining Committee for this year, and joined the President of the Library Board with it, as chairman. The names of those persons who were appointed and who have served as members of the committee are as follows:

Mr. Timothy J. Ahern.	Mr. Albert Levis.
Mrs. Elisha S. Boland.	Dr. George A. McEvoy.
Mr. Sewall C. Brackett.	Mrs. Colin W. Macdonald.
Mrs. R. Brindisi.	Rev. Timothy J. Mahoney.
Mr. George E. Cabot.	Mr. Henry B. Miner.
Miss Alice R. Cole.	Mr. Hugh Nawn.
Mr. John F. Cronin.	Mr. John Ritchie, Jr.
Mr. John S. Flanagan.	Mr. John J. Sheehan.
Mr. Charles C. Haines.	Rev. Philo W. Sprague.
Mr. James F. Hopkins.	Mr. Arthur L. Spring.
Mr. M. A. deWolfe Howe.	Mr. Michael J. Sughrue.
Mr. Arthur S. Johnson.	Mrs. William Taylor.
Rev. Joseph V. Tracy, D. D.	

In order to enable this committee to perform its duties with convenience and efficiency the following subcommittees were appointed:

ADMINISTRATION AND FINANCE.

This committee considered the administration of the library, its working as an entire system, including the Central Library and all branches and reading-room stations, and, in connection

with this, its financial management, including the sources from which its revenue is derived and the manner in which it is expended. Its members were:

Mr. Cabot, *Chairman*.
 Mr. Nawn. Mr. Spring.
 Mr. Johnson.

BOOKS AND FINE ARTS.

This committee gave attention to all matters connected with the acquisition and use of books and other library material, and to the Department of the Fine Arts and Music. Its members were:

Mr. Hopkins, *Chairman*.
 Miss Cole. Mr. Howe.

PRINTING AND BINDING.

This committee examined and considered all matters connected with the Departments of Printing and Binding, with special attention to the expenses of the departments and the products of each of them. Its members were:

Mr. Ritchie, *Chairman*.
 Mr. Cabot.

BRANCHES AND READING-ROOM STATIONS.

It was thought best to divide the branches and reading-room stations into groups in different parts of the city, and appoint a committee of three to examine and report with regard to each group. These groups and the several committees thus appointed were as follows:

South Boston and South End Branches, City Point and Broadway Extension Reading Rooms.

Rev. T. J. Mahoney, *Chairman*.
 Dr. McEvoy. Mrs. Boland.

Charlestown and East Boston Branches, Orient Heights Reading Room.

Mrs. Taylor, *Chairman*.
 Mr. Flanagan. Rev. P. W. Sprague.

Brighton, Jamaica Plain, West Roxbury and Hyde Park Branches, Roslindale, Boylston Station, Warren Street, Roxbury Crossing, Parker Hill and Allston Reading Rooms.

Mr. Miner, *Chairman*.
 Mr. Brackett. Rev. J. V. Tracy.

Dorchester, Roxbury and Upham's Corner Branches, Codman Square, Mt. Pleasant, Mt. Bowdoin, Lower Mills, Mattapan and Neponset Reading Rooms.

Mr. Cronin, *Chairman.*

Mr. Ahern.

Mr. Sheehan.

West End and North End Branches.

Mr. Levis, *Chairman.*

Mr. Sughrue.

Mrs. Brindisi.

CHILDREN'S DEPARTMENT AND WORK WITH SCHOOLS.

This committee gave special attention to the work which the library is doing for children and also to what it is doing in connection with schools, with regard not only to the way in which the work is done but also as to its extension and its limitation. Its members were:

Mr. Haines, *Chairman.*

Mrs. Macdonald.

Mrs. Taylor.

GENERAL COMMITTEE.

For the purpose of receiving the reports of the work of the various other subcommittees, and preparing a draft report of the Examining Committee to be considered by it in a meeting of all its members, and for any other general purpose connected with the examination of the library system, a subcommittee, called the General Committee, was appointed. Its members were:

Mr. Howe, *Chairman.*

Mr. Miner.

Miss Cole.

The report of the committee is hereto annexed and included as part of this report.

CONCLUSION.

The trustees have held regular weekly meetings during the entire year except in the summer months. One or more of them have visited all the branches and reading-room stations at least once during the year, and have given constant supervision to the construction of the Charlestown Branch building and the East Boston Branch building. The library affairs have moved smoothly and well during the year, owing to the loyal and faithful service of the librarian and heads of departments and other persons in our employ. We are glad to be able to commend the substantially uniform excellence of their work.

JOSIAH H. BENTON.

WILLIAM F. KENNEY.

SAMUEL CARR.

ALEXANDER MANN.

JOHN A. BRETT.

FINANCIAL STATEMENT.

EXPENDITURES.

Central Library and branches:

To expenditures for salaries:

General administration . . \$204,809 52

Sunday and evening force . . 28,050 37

\$232,859 89

To expenditure for books:

From city appropriation . . \$23,707 74

Trust funds income . . . 15,503 93

Carnegie gift, Galatea collection . . . 35 49

Sullivan bequest . . . 394 82

39,641 98

To general expenditures:

Newspapers from Todd Fund income . . . \$2,000 00

Periodicals . . . 7,452 72

Furniture and fixtures . . . 4,940 28

Gas . . . 2,863 10

Electric lighting . . . 2,890 39

Cleaning . . . 9,275 80

Small supplies . . . 3,890 68

Ice . . . 231 74

Stationery . . . 2,037 58

Rents . . . 14,710 64

Fuel . . . 13,268 70

Repairs . . . 3,680 40

Freights and cartage . . . 1,963 33

Transportation between central and branches . . . 5,299 20

Telephone service . . . 647 94

Postage and telegrams . . . 1,074 00

Typewriting . . . 16 25

Traveling expenses (including street car fares on library service) . . . 452 66

Grounds . . . 267 31

Lecture account (including lantern slides and operator) . . 259 23

Miscellaneous . . . 764 63

77,986 58

Carried forward . . . \$350,488 45

<i>Brought forward</i>		\$350,488 45	
Printing Department:			
To expenditures for salaries	\$7,208 42		
To general expenditures:			
Stock	2,169 10		
Equipment	68 44		
Electric light and power	77 17		
Contract work	469 52		
Rent	450 00		
Freights and cartage	158 20		
Insurance	258 14		
Gas	255 92		
Cleaning	153 15		
Small supplies, ice, repairs, furniture and fixtures	74 63		
			11,342 69
Binding Department:			
To expenditures for salaries	\$29,296 04		
To general expenditures:			
Stock	3,591 71		
Equipment	671 00		
Electric light and power	85 20		
Contract work	9 25		
Rent	1,350 00		
Freights and cartage	747 50		
Insurance	169 50		
Gas	55 70		
Cleaning	155 05		
Small supplies, ice, repairs, furniture and fixtures	158 72		
			36,289 67
To amount paid into city treasury:			
From fines	\$6,099 81		
Sales of catalogues, bulletins and lists	67 52		
Commission on telephone stations, ...	227 10		
Sale of waste paper	94 88		
Money found in library	14 64		
Interest on deposit	66 58		
			6,570 53
To balance, January 31, 1914:			
Trust funds income on deposit in London	\$6,950 24		
City appropriation on deposit in London	2,005 16		
Trust funds income balance, city treasury	12,455 15		
Carnegie gift for Galatea collection, ...	279 79		
			21,690 34
			<u>\$426,381 68</u>

RECEIPTS.

By city appropriation, 1913-14 . . .	\$380,000 00	
Income from trust funds . . .	18,277 13	
Interest credited on bank de- posits	66 58	
Payments received for lost books, Sullivan bequest	399 27	
By transfer, by City Auditor, from unexpended balances of other city appropriations . . .	414 28	
		\$399,552 08
By balance brought forward, February 1, 1913:		
Trust funds income on deposit in London	\$1,899 73	
City appropriation on deposit in London	1,378 18	
Trust funds income balance, city treasury	16,732 46	
Carnegie gift for Galatea collec- tion	315 28	
		20,325 65
By receipts:		
From fines	\$6,099 81	
Sales of catalogues, bulletins and lists	67 52	
Commission on telephone sta- tions	227 10	
Sale of waste paper	94 88	
Money found in library	14 64	
		6,503 95
		<u>\$426,381 68</u>

REPORT OF THE EXAMINING COMMITTEE.

To the Trustees of the Public Library of the City of Boston:

GENTLEMEN,—We beg to transmit through you to the city government the report of the Examining Committee appointed by you, according to ordinance, and organized and guided by the president of your Board. Recognizing and acknowledging most heartily the pains and courtesy with which our organization was effected and our investigations were aided, we are yet obliged to question whether in future years it might not be possible to devise a system under which the work of this committee might be rendered more effective. The question is raised rather with regard to a system which has gradually grown out of developing circumstances than in any spirit of criticism of its present application. Might not a smaller body, made up of persons not only qualified to make special investigations but of ascertained willingness and freedom, in point of time, to pursue their inquiries with thoroughness, serve the city to better purpose than the Examining Committee, as now constituted, can hope to do? We are glad, in spite of this query, to take the situation as we have found it, and, as the result of three well attended meetings of the entire committee, of various consultations of the subcommittees, and of much individual inquiry and thought, to present the following considerations:

In every institution with constantly extending fields of usefulness, the opportunities to spend money to advantage are prone to increase more rapidly than the funds. Previous Examining Committees have laid emphasis upon the fact that this is conspicuously true of the Boston Public Library. Our own investigations have led us to the same conclusion. More money is needed for certain fundamental purposes. One of these is the purchase of books for the Central Library, for the branch libraries, for the reading rooms. In particular, the books for children are used so much that their condition renders constant replacement both desirable and, on sanitary grounds, necessary. Yet this replacement, through lack of funds, is often too long deferred or left

undone. Additional funds, moreover, could be used, not only in the purchase of single copies of books, but also in enlarging the supply of duplicate copies in the fields of standard imaginative literature for children, of standard technical works and standard fiction. The demands of the branch libraries could thus be more satisfactorily met from the Central Library. Another of the fundamental purposes for which more money is needed is the increase of salaries — a subject to which a later paragraph of this report is devoted.

The subcommittees appointed by your Board have made investigations of special subjects. The Committee on Administration and Finance has considered some of the most important questions affecting the welfare of the library. This committee has held several meetings at the library, and in company with the assistant librarian has made a personal examination of all the departments with the exception of the Printing and Bindery Departments. The heads of these departments have been in all cases most courteous in explaining the work in their charge; and the members of the committee have individually given a considerable amount of time to familiarizing themselves thoroughly with the many intricate operations connected with the administration of the library and its branches, as operated from the Central Library.

The general committee joins with this subcommittee in repeating the recommendation in the report for 1913 that a definite amount of money should be appropriated for buying books each year in order that the annual supply of newly purchased books may be placed on a definite basis. We wish also to call attention again to the importance of pension legislation in connection with the library employees. On this point the general committee begs to lay a special emphasis, believing it to be a point of the highest moment.

The method of distribution and exchange of books between the Central Library and its branches has been improved during the past year by the use of motor cars. It is encouraging to hear from the librarian that a further extension of motor service is in contemplation.

The Committee on Administration and Finance is impressed with the lack of room in the Central Library, which necessitates not only the housing of the departments of printing and binding elsewhere at cost and inconvenience but also the use of the cellar for a stack.

Either the policy of the library must change soon or means must be secured for an extension of the present building. The latter seems the consistent course.

We desire, therefore, to bring to the attention of the city government the fact that such extension is urgently needed. We beg to call special attention to the suggestion that there is a strip of land in the rear of the Central Library building which seems adequate to the needs of some years to come. The land on the Boylston street end belongs to Boston University, and is unoccupied so far as buildings are concerned. The strip measures roughly 28 feet on Boylston street by 128 feet deep, and contains between 3,500 and 3,600 square feet, assessed at \$21 per foot. On the Blagden street end there are two buildings which it would be advisable to take. These estates, No. 15 and No. 17 Blagden street, contain 4,880 square feet, assessed for \$75,000, the total assessed valuation of the proposed taking, therefore, being in the neighborhood of \$150,000.

If this strip were seized for an addition to the Central Library it would have certain advantages in point of convenience and expense. A building could probably be erected on this land for less than \$200,000. Ready access might be had through a passageway from Exeter street, and shipments of books might here be made under cover instead of across a sidewalk. The addition would be large enough to add materially to the stack room, and perhaps afford a chance to rearrange some of the utilities and afford greater space for the public rooms of the library. If the chance to rearrange utilities could be seized for improving the public toilet rooms, a sorely needed betterment of bad conditions might well be accomplished. The top story, with roof lighting, would be admirably adapted for mechanical purposes. We are well aware that the adoption of the suggestion will involve a transaction of some magnitude, but the need for increased space is great and immediate, and the longer the meeting of this need is deferred the more difficult the problem is likely to become.

Through the Subcommittee on Books and Fine Arts we learn that the Ordering and Cataloguing Departments have been visited and the work of Bates Hall and the Delivery Room has been inspected.

The system of ordering seems well devised to bring to the attention of the trustees the books which ought to

be purchased, and the processes of elimination seem equally well planned to exclude undesirable additions. The process of dealing with works of fiction, with the help of a Reading Committee made up of men and women of widely various interests and tastes, serves well the purpose of selecting the comparatively small number of novels and collected short stories which are purchased under the library's system of limited supply in this field of literature. This system appears to be based upon a wise policy, not only in the service of the public but also in the expenditure of the library funds. Since the accession of a single novel means the purchase of twenty or more copies,—to supply all the shelves in different parts of the city on which it must be placed,—the limiting of purchases is imperative. A Reading Committee, made up of representatives of diverse races and religions, and acting merely in an advisory capacity, is well calculated to give the trustees the help they need. We do not find that any racial or religious influence is predominant in the working of this plan.

The cataloguing is thorough from the technical point of view, and practical in its aids to the average unskilled seeker for books. The handling of books desired for use in Bates Hall and for home use appears as expeditious and exact as the physical conditions will permit.

In the practice of many necessary economies it is highly important that the value of the library to scholars in special fields should be maintained unimpaired by the failure to purchase any of the best fruits of scholarship. Is it not possible that some funds might be conserved for these special purchases by extending the cooperation which already exists between the Boston Public Library, the Harvard College Library, the Boston Athenæum and the State Library? The details of any such arrangement, involving a special emphasis upon separate fields of purchase by the individual libraries, would have to be determined by the persons in charge of each. Especially in the binding of newspapers, perhaps the bulkiest volumes a library has to house, some economies by the avoidance of duplication in a single community may be practicable. The fact that the paper on which most of the daily journals are printed is destined to early dissolution makes such preservation a peculiarly thankless task. One newspaper in Greater New York prints a few copies of each issue on durable paper for purposes of preservation. With encouragement from the libraries,

might not other journals be persuaded to pursue the same course? Could not the Boston Public Library take the lead in such a movement?

The organization, work, resources, opportunities and accomplishments of the Department of Fine Arts and Music have received close attention. This department has, since its organization, been one of the most important influences in the Boston Public Library. The City of Boston is most fortunate in being the home of influential schools of art. It is a museum center of importance. In musical education and in popular appreciation of music the city is probably second to none. Not only do these institutions and their student following turn to the Public Library for assistance and research, but the library must meet the demands of its art-loving and art-studying citizens. The Department of Fine Arts and Music has reached a stage of usefulness at which its work may well be compared with that done in Bates Hall. On the occasions of many visits practically every table has been occupied by students working under the conditions which sooner or later must be amplified as the number seeking the use of the collections increases.

Only commendation can be offered concerning the work of the employees of the department. This section of the library administration requires unusual training, the broadest insight into important subjects, rare courtesy, and executive ability of the highest order. These desirable qualities in staff employees are not easily obtainable. The Boston Public Library is fortunate in possessing men and women of such training in the service of this department. Particularly we would recommend consideration of the hours of service given by certain members of the staff. The library attendant, a teacher in very truth, must come to his or her work free from fatigue, refreshed by hours of reading or relaxation, and equipped with power to keep abreast of the times. This he or she cannot do if, for the sake of additional income, they give night service or Sunday service in addition to full daily hours. We believe it to be a short-sighted policy to wear out loyal workers before their time. We believe that library hours in this department should not be longer than from nine to six o'clock and we do not feel it consistent with the dignity of the work and the wide appreciation of this department on the part of the citizens of Boston to expect attendants to attain desired salaries by a system

of night and Sunday work in addition to full daily service. The same objections to night and Sunday service are applicable throughout the staff of library employees.

More assistance in the Fine Arts Department could be used to excellent advantage, especially in expediting the labeling, cataloguing and general preparation of the photographs which are constantly coming to the library in large quantities. As many as five thousand photographs which would undoubtedly be in valued active service if only prepared for public use have been seen waiting their turn on the preparation tables.

The growing use of the collection of lantern slides in the possession of the library, now amounting approximately to forty-five hundred examples, is a matter of special interest. There has been an increase in the number of slides circulated, which is probably close to three thousand examples for the current year. It is learned from inquiry that many Boston schools are, to a greater or less extent, purchasing collections for the several school buildings, undoubtedly in many instances piling up duplicates purchased with money which could be made to go farther if the slide collection could be administered by some central body. This the library is well equipped to do. It would seem as if some constructive scheme of cooperation between the School Committee and the trustees of the Boston Public Library might be worked out under which annual appropriations might be expended by a joint committee made up of representatives of the School Board, the trustees of the library and the teaching corps of the City of Boston.

The admirable Music Department offers unusual opportunities for study and reference. This department is used constantly by students and musicians and is managed with efficiency and success. The department is, like the others of the Public Library, outgrowing its quarters, but we would urge that the present setting for the music collection be improved by tinting the ceiling and by placing a few bas-reliefs of classic musical figures, already owned by the library, in the large wall spaces. It would also be of value to the student and of interest to other visitors if autographs, rare programs and short manuscripts were framed and hung in available places.

The Subcommittee on Printing and Binding finds these departments housed in a commercial building at con-

siderable distance from the Central Library. The disadvantages of this arrangement are obvious, including haulage, risk from fire which might destroy what is not to be replaced, and the handicaps attending the use of premises not particularly well adapted to the purposes. The committee believes this to be a strong reason, among others, for an extension of the Central Library which will again bring these departments within its walls.

The bindery appears to be conducted with modern efficiency and needs more than anything else repair or replacement of a few worn-out machines. The printing office is known the world over as the pioneer in its line. Modern machines make it possible to handle all kinds of legitimate library composition and printing. Its main mechanical need seems to be additional sets of matrices for the linotypes.

The subcommittee appointed to inspect the South Boston and South End Branch Libraries and the City Point and Broadway Extension Reading Rooms reports that the most obvious need of the South Boston Branch is a new building; or at least larger quarters more in keeping with the demands of a population of over eighty thousand people. There should be more books and some provision for the separation of the adult and juvenile readers, to the manifest advantage of both. Meanwhile the experiment of allowing the young girls to use the small reading room at present reserved for adults is suggested. It is realized that this plan is open to objection, but it offers the only means of relieving the overcrowding of the limited space now occupied by both boys and girls. The ceilings of this library are dingy and need whitening.

The South End Branch was found to be in a very satisfactory condition, but the lights in the upper room are much too high. Those directly over the tables should be lowered at least two feet, and should be shaded in order to give better service to the readers and to shield their eyes from the intolerable glare which now prevails.

Inasmuch as the City Point and Broadway Extension Reading Rooms are soon to be removed to new municipal buildings, no special recommendations are made in regard to them. The common demand for more books will doubtless be met in the new quarters, which provide for more stacks and shelves, and certain improvements

in administration can be made when these reading rooms are established in new buildings. A word of special commendation must be said for the several custodians and their assistants, all of whom seem to be thoroughly interested in their work and to be rendering the best service possible under present conditions.

At the Charlestown Branch there is a crying need for a system of ventilation. Neither at this branch nor in the East Boston Branch now in process of construction, has any provision been made for a public convenience station. This should be corrected. In visiting both these branches the representatives of our committee have been impressed with the intelligence and excellent character of the young women employed.

At the Jamaica Plain Branch Library everything has been found in excellent condition. The single suggestion offered is that the lights, as at the South End Branch, might with advantage be lowered very considerably.

The Warren Street Reading Room appears to be doing very good work under great disadvantage. It is in a single rather ill-lighted room designed for a store. The circulation from its own shelves in 1912-13 was 26,772; in 1913-14, 43,094. In addition to these numbers, the reading room gave out from the Central Library about 6,000 volumes in 1913-14, making a total of nearly 50,000 books. Thus in one small room there appears to be about the same circulation as in the Jamaica Plain Branch with its spacious and well appointed rooms. It would seem, then, that the Warren Street Reading Room should have better quarters, perhaps by adding to its present room the adjoining store which is at present vacant.

At the Roxbury Crossing Reading Room there is a call for more shelves. The room is very large and would accommodate quite a number of permanent books; and as there seems to be a good deal of demand there for books to be taken out directly from the reading room, it would add to the usefulness of the room to increase the number of bookcases.

The children's reading room is an important element in the Hyde Park Library. Although the room, situated in the addition, has been completed for about one year, its furniture did not arrive until about three weeks ago, and the lights called for under the system of lighting adopted in this room have not yet been furnished. In greater detail it may be said that the room is lighted by

an overhead lighting system. The hanging receptacles are in position and are supposed to carry forty candle power lamps, but as they have not yet been inspected the lamps cannot be inserted and the light intended by the plans for this room cannot be obtained. Some inquiry might well be made to ascertain why so long a time has elapsed during which this addition to the library has been idle. In addition a simple electric light should be introduced in the basement under the addition in the Hyde Park Library, for the use of the janitor.

The subcommittee assigned to visit the Dorchester, Roxbury and Upham's Corner Branch Libraries and six reading rooms has visited all these places. The fine enthusiasm displayed by the custodians and their assistants in the great work of assisting the public in selecting and making the best use of the pictures and magazines impressed the visitors strongly. The children seem to be the greater readers, giving promise that when they grow older they will show an increasing interest in the use of the library and its branches.

The Dorchester Branch of the library has the same entrance as the Dorchester District Court. This is very objectionable for many reasons, especially since defendants and witnesses use the library as a waiting room, and are very often objectionable persons whose example and condition are not fit for older persons and especially children to see.

The reading room at Mt. Bowdoin is doing excellent work. The Upham's Corner Branch seems to be ideally situated, with its separate room for children and with its very capable custodian catering to an ever-increasing population. Mr. Sheehan of the subcommittee was fortunately present one day when Mrs. Cronan was having her hour for telling stories to the children, using the stories to excite an interest in the children so that they might acquire greater knowledge and love for the best in books and life.

The Mt. Pleasant Reading Room is far less desirably situated than it will be when the new municipal building for that section of the city can accommodate it. The businesslike system by which receipts are given for fines, here as throughout the library system, is specially commended.

Conditions in other branch libraries, all of which were visited, seem to be satisfactory, save that there is general complaint of shortage of books, particularly fiction.

One of the reading-room custodians stated that she had received about one hundred and fifty books since January 15, 1913, and only two since last August. The Codman Square Reading Room is in need of four more sections of shelves.

Conditions at the North End and West End Branches are greatly improved. There is a marked increase in number of readers and demand for books. There is no complaint whatever of the service. It has been noted that the Italian element at the North End Branch would be very much better accommodated if more Italian books could be obtained from the local shelves. There have been repeated demands, which could not be granted, for the following publications: *Reviews*: La Lettura (Milan); La Rassegna Contemporanea (Rome); La Donna (Turin); Corriere dei Piccoli (Milan); Il Marzocco (Florence); *Books*: Viaggi in Affrica della Duchessa D'Aosta (Milan); Collezione Italiana Artistica (Istituto d'arte Geografica, Bergamo); Biblioteca dei Ragazzi — 40 volumes (Istituto Editoriale, Milan); Collezione Profili (Formizzini, Genoa).

At the Lecture Room in the North End Branch much interest is taken in the illustrated lectures. At the present time the preparations for these lectures are openly made, and much of the effect from the lectures is thereby lost. It would be advisable to provide a suitable curtain.

The special committee on the work the library is doing for children commends the wisdom and foresight of the trustees in developing so excellent a system. No device is suggested for the furtherance of this important work. The masters of the Girls' Latin and several grammar schools report that the library is usually able to supply them with the books they require. These teachers could offer no suggestions for further cooperation.

With particular reference to children it is reported, as in the special report upon the Jamaica Plain Branch, that the lights are here placed too high above the tables for comfort in reading. This complaint has been frequently made to the custodian. There are desk lights which are not in use, because it has been found the children are very likely to interfere with them. The Roslindale Reading Room seems to be difficult to keep at a comfortable temperature and some children who were reading said they frequently found it cold. At

the Boylston Station Reading Room the custodian reports that there are frequent calls by the children for German books which the library cannot supply. This reading room is in the heart of a large German colony. The Warren Street Reading Room was found so uncomfortably crowded by people waiting in line for books to take home that the children reading at the tables were disturbed. This reading room is altogether inadequate in size for the demands of the district. The custodians are working under great difficulties and their desk space is very limited. Their discipline under these trying conditions is much to be commended. More shelf room and books are needed in all the branches and reading rooms. Roxbury Crossing Reading Room especially asks for more books for children, as it cannot supply the demand for them.

Among many matters brought to our attention and covered by the various subcommittees as well as by the general committee was the question of the salaries paid in the library. We feel that this difficult matter must be treated with much care and deliberation. The library employees are not isolated groups which can be treated separately, especially in the matter of their compensation. The compensation paid in one part of the library is of necessity intimately connected with that paid in every other part. We should be sorry in touching upon salaries to embarrass the trustees in their efforts to treat the subject justly but with due regard to the money placed at their disposal by the City Council. Yet upon such consideration as we have given to the matter our opinion is that the salaries paid in the library are on the whole incommensurate with the qualifications and service required of the employees. In the discussion of this matter at our meetings it was learned that the trustees have under consideration and are about to propose a comprehensive scheme for the increase of salaries. In order, therefore, to avoid complication by advocating other schemes, the Examining Committee passed the following vote:

Resolved, That it is the sense of the Examining Committee that a sum not less than ten thousand dollars (\$10,000) should be added to the appropriation of the library this year to meet the increases in salary which may be deemed necessary by the trustees.

We hope the City Council may furnish the trustees at least with this sum, so that salaries not only just in

themselves but measurable with the value of the work in the library and with the good name of the city may be paid. This is an important matter. The personnel of the library service will surely suffer under the existing conditions, and, indeed, many instances indicate that it has already suffered. The personal influence of the employees over the children and others who resort to the reading rooms cannot be overestimated. The incentive of good salaries — not a living wage — should be held out in order to attract persons of education and refinement to the important work of directing the reading of children and aiding, in the best and most helpful ways, the persons who use the library.

In conclusion we can but recognize the fact that many of the definite suggestions of this report lie in the direction of increased expenditures. We should have been glad to point out advantageous ways by which money could be saved. But the commercial and industrial growth of Boston must be paralleled — if the city is to maintain its place — by a corresponding growth in the things that minister to the mind and the spirit. The library is the chief public reservoir and distributor of these things. The present trustees have formed and are carrying out many admirable plans for continuing and extending the usefulness of the library. We join in commending the spirit and the execution of these plans, and in urging upon the city the wisdom of providing in every way for their fulfillment.

REPORT OF THE LIBRARIAN.

To the Board of Trustees:

I respectfully submit my report for the year ending January 31, 1914.

REPAIRS AND IMPROVEMENTS.

Such usual and customary repairs have been made at the Central Library and branches as were required to keep the plant in operative condition. The fire boxes to the boilers at the central building have been relined and new bridge walls built. These boilers are regularly inspected by the Hartford Steam Boiler and Inspection Company, and their present condition is satisfactory.

The repairs upon the overhead system of steam piping, on the special libraries floor, amounting to complete replacement after seventeen years of service, have been completed. The elevators in this building, subjected to regular monthly inspection, are in good order, and they have been continuously operated during the year, without accident.

Gradually, as need arises for new lamps, those having tungsten filaments have been substituted for the ordinary carbon type, and lamps of the new style are now in use in all the corridors, in Bates Hall and in the Fine Arts and Children's Departments. Extensive repairs were made during the summer upon the plastered surface of the groined arches in the courtyard arcade.

The new buildings at Charlestown and on North Bennet street have been completed and opened, enlarging our opportunities for effective work in those districts. A new iron fence has been erected by the Fellowes Athenæum, the owners of the building occupied by the Roxbury Branch; the Public Buildings Department has repainted and otherwise improved buildings in their control but partly occupied by the library in West Roxbury, at Upham's Corner and in Dorchester, and the owners have similarly cared for buildings held by us under lease at Mattapan, on Warren street and at Orient Heights.

About fifty framed pictures have been hung at various branches and reading rooms, adding to the attractive appearance of the rooms.

THE USE OF BOOKS.

During the year 1,848,973 books have been lent for use outside the various library buildings. This may be compared with 1,744,878, the number similarly lent during the preceding year. To prevent misleading use of these figures the following statement is repeated from former reports:

“The tabulated figures are of value in comparison with our own similar figures presented in other years, but they should not be closely compared with the records of other libraries, unless it is certain that such records have been made upon exactly the same system as that in use by us.”

The statistical tables follow, showing the recorded circulation in detail. The figures for the Central Library are based upon the annual report of Mr. Frank C. Blaisdell, chief of the Issue Department. The figures for the branches are from the reports of the custodians, made month by month.

The figures reported by months are presented in detail:

CIRCULATION FROM CENTRAL BY MONTHS.

	Home use Direct.	Home use Through Branch De- partment.	Schools and Institutions Through Branch De- partments.	Total.
February, 1913.....	30,096	10,145	10,388	50,629
March, “	26,671	9,069	10,299	46,039
April, “	26,035	8,523	9,862	44,420
May, “	21,904	7,119	10,472	39,495
June, “	18,998	6,085	9,500	34,593
July, “	14,032	4,131	2,748	20,911
August, “	14,643	3,797	2,717	21,157
September, “	14,898	3,304	3,460	21,662
October, “	18,816	4,655	6,251	29,722
November, “	25,346	7,896	8,083	41,325
December, “	25,258	8,026	8,887	42,171
January, 1914.....	24,268	7,370	9,540	41,178
Totals.....	260,965	80,120	92,207	433,292

	Home Use.	Schools and Institutions.	Total.
Central Library:			
a. Direct.....	260,965		
b. Through branches and reading-room stations,	80,120		
c. Schools and institutions through branch de- partment.....		92,207	433,292
Branches:			
Brighton.....	36,215	12,785	49,000
Charlestown.....	50,332	7,721	58,053
Dorchester.....	45,375	15,507	60,882
East Boston.....	91,572	13,187	104,759
Hyde Park.....	69,588	1,210	70,798
Jamaica Plain.....	42,700	5,611	48,311
North End.....	30,445		30,445
Roxbury.....	79,551	12,301	91,852
South Boston.....	90,657	12,951	103,608
South End.....	85,675	12,070	97,745
Upham's Corner.....	94,370	6,566	100,936
West End.....	100,986	8,699	109,685
West Roxbury.....	34,658	6,304	40,962
Reading-room Stations:			
A. Lower Mills.....	17,550		17,550
B. Roslindale.....	47,035	278	47,313
D. Mattapan.....	10,795		10,795
E. Neponset.....	17,438		17,438
F. Mt. Bowdoin.....	38,742		38,742
G. Allston.....	32,756		32,756
J. Codman Square.....	50,076		50,076
N. Mt. Pleasant.....	24,413		24,413
P. Broadway Extension.....	26,421	143	26,564
R. Warren Street.....	43,398		43,398
S. Roxbury Crossing.....	21,126		21,126
T. Boylston Station.....	26,146		26,146
Z. Orient Heights.....	13,350		13,350
23. City Point.....	47,129		47,129
24. Parker Hill.....	31,849		31,849
Totals.....	1,641,433	207,540	1,848,973

The figures for the entire system are condensed into a single statement as follows:

BOOKS LENT FOR HOME USE, INCLUDING CIRCULATION THROUGH SCHOOLS AND INSTITUTIONS.

From Central Library (including Central Library books issued through the branches and reading-room stations)	433,292
From branches and reading-room stations (other than books received from Central)	1,415,681
Total number of volumes lent for home use and through schools and institutions . . .	<u>1,848,973</u>

Comparative statements for two consecutive years follow:

	1912-13.	1913-14.
Central Library circulation (excluding schools and institutions):		
Direct home use	264,507	260,965
Through branches and reading-room stations for home use	77,325	80,120
	341,832	341,085
Branch Department circulation (excluding schools and institutions):		
Direct home use:		
From branch collections	781,324	852,124
From reading-room stations	429,986	448,224
	1,211,310	1,300,348
Schools and institutions circulation (including books from Central through the branch system)	191,736	207,540
	1,744,878	1,848,973

The unrecorded circulation of the library, that is, the use of books in the various reading rooms by students and general readers, is very much greater than the recorded circulation which appears in the preceding tables. It is as important and in some respects more important than the recorded circulation. It includes an extensive use of books by scholars engaged in serious research, by pupils from the schools and colleges, by study classes which are investigating special subjects, as well as the use of books by those who, for various reasons, prefer to read in the library instead of at home.

At least 300,000 volumes in the Central Library, branches and reading-room stations are now on open

shelves, to be used freely by the public. It is impossible to record this use statistically, but it should not be forgotten in connection with the inspection of the usual tables of recorded circulation.

The Branch Department draws very heavily from the Central Library collection. It is one of the distinctive features of this library that any borrower may be supplied with books from the Central Library upon a request made at a branch, the desired volumes (unless already in the hands of other borrowers) being sent out by means of our daily wagon system of delivery. This facility of use of Central books through the branches tends to reduce somewhat the direct Central circulation for home readers. It will be noted from the tables that this circulation shows a slight decline for the past year as compared with the year preceding. On the other hand, the circulation from the Central Library through the branches and reading-room stations shows an almost equal increase, leaving the total Central Library circulation for home use virtually unaffected. Year by year the use of the branches as the chief agencies for obtaining popular books for home reading, whether from the branch collections themselves or from the Central Library, is likely to increase. But the use of the Central Library as the chief agency for reference work increases, and undoubtedly will continue to increase.

The number of places supplied with books on deposit from the Central Library shows an increase of three, and the number of volumes sent on deposit was 42,828 as against 42,587 in 1912. There is at the Central Library a distinct collection of books for use in deposits, thereby diminishing the demand for books from the stacks, which would otherwise be drawn upon for deposit use. This prevents the alienation of stack books from the regular patrons of the Central Library or from those who call for such books upon cards at the branches.

During the year 22,200 unbound copies of periodicals have been sent to public institutions, to the coffee rooms of the Church Temperance Society, or to the State Prison.

A tabular statement follows of books lent or borrowed on the inter-library loan arrangement with other libraries, showing the operations of two successive years:

	1912-13.	1913-14.
Lent to libraries in Massachusetts.....	987	1,179
Lent to libraries outside of Massachusetts.....	264	230
Totals.....	1,251	1,409
Applications refused:		
From libraries in Massachusetts.....	307	270
From libraries outside of Massachusetts.....	62	84
Totals.....	369	354
Borrowed from other libraries.....	23	22

The inter-library loan plan enables us to borrow occasionally from other libraries books which we do not possess for the temporary use of our card holders. In the same way we occasionally lend to other libraries, for temporary use, books which they do not own, which may be needed by their readers. Books are never lent in this way which are in urgent demand at the home library, and, in general, the books lent include only those required for study and those which the borrowing library cannot easily obtain by purchase.

BOOKS RECEIVED.

A statistical statement of the number of books received follows:

Books Acquired by Purchase.

	1912-13.	1913-14.
For the Central Library:		
From city appropriation.....	8,353	8,493
From trust funds income.....	3,711	3,367
	12,064	11,860
For branches and reading-room stations:		
From city appropriation.....	11,734	13,952
From trust funds income.....	926	1,504
	12,660	15,456
	24,724	27,316
By Fellowes Athenæum (for the Roxbury Branch).....	943	1,017
Totals.....	25,667	28,333

The following statement shows whether the books added to the library during the year have been obtained by purchase, gift or exchange:

	Central, Volumes.	Branches, Volumes.	Total Volumes.
Accessions by purchase (including 1,017 volumes by Fellowes Athenæum, for Roxbury Branch).....	11,860	16,473	28,333
Accessions by gift (including 24 volumes through Fellowes Athenæum, for Roxbury Branch).....	6,294	585	6,879
Accessions by Statistical Department.....	489	.....	489
Accessions by exchange.....	339	106	445
Accessions of periodicals (bound).....	2,000	401	2,401
Accessions of newspapers (bound).....	100	.....	100
Totals.....	21,082	17,565	38,647

PURCHASES OF FICTION.

The number of volumes of fiction (new publications) examined during the year was 932, and from these a selection of 175 titles was made (including fiction for young readers), and 2,758 copies were bought. Replacements and additional copies of fiction already in the catalogue were bought to the extent of 8,541 volumes. This statement covers all fiction, whether in English or other languages, and its total cost was \$10,892.33, or about 28 per cent of the amount expended for all books.

NOTEWORTHY ACCESSIONS.

The report of Miss Theodosia E. Macurdy, Chief of the Ordering Department, furnishes the following details as to important accessions:

PURCHASES.

Almanacs.

Almanack of Almanacks, collected from Poor Job, and others. For the year of our Lord, 1752. Boston: Printed and sold by Fowle in Queen-Street.

Bickerstaff's New England Almanack for the year of our Lord, 1780. Norwich: Printed . . . by J. Trumbull.

Connecticut Almanack, for 1768. By Clark Elliott. New London, Printed and sold by Timothy Green.

Franklin Almanack for the year . . . 1795. Boston: Printed and sold by Joseph Bumstead.

Freebetter's Connecticut Almanack, for the years 1774, 76, 77, 78. New London, Printed and sold by T. Green.

Freebetter's New-England Almanack, for the year 1776. New London, Printed and sold by T. Green.

- New England Town and Country Almanack, containing an Ephemeris . . . for the year 1769. . . . By Abraham Weatherwise, Gent. Providence: Printed and sold . . . by Sarah Goddard and John Carter.
- N. England Kalendar, 1704, or an Almanack for the year . . . 1704. By a Lover of Astronomy. Boston: Printed by B. Green and J. Allen. . . . 1704.
- New England Town and Country Almanack, containing an Ephemeris . . . for the year of our Lord, 1769. By Abraham Weatherwise, Gent. Providence: Printed and sold . . . by Sarah Goddard and John Carter.
- Philo's Essex Almanack, for the year . . . 1770. Salem: Samuel Hall.
- Poor Robin, 1682. An almanack after a new fashion . . . Wherein the Reader may see (having before his eye-sight with a good mornings Draught) many remarkable things worthy of precious observation. Containing a twofold kalendar; . . . Written by Poor Robin, Knight of the Burnt-island, a well-wisher to the Mathematicks. London: Printed for the Company of Stationers, 1662.
- Travis, Daniel. An Almanack of Coelestial Motion and aspects for the years 1711, 19, 20. Boston.
- Weatherwise, Abraham. Father Abraham's Almanack, for the year of our Lord, 1770. Philadelphia: John Dunlap.
- Wheten, George. An astronomical Diary: or, An Almanack for the year . . . 1754. Boston; Printed and Sold by D. Fowle, next the Prison in Queen Street.
- Whittemore, Nathaniel. An almanack for the year 1728. Printed for Nicholas Boone. Boston.

Books.

- Aubert, Edouard. Trésor de l'Abbaye de Saint Maurice d'Agaune. 45 plates. Many of the plates are colored. Paris. 1872.
- Baker, C. H. Collins. Lely and the Stuart portrait painters before and after Van Dyck. With 240 reproductions after the original pictures. 2 v. London. Philip Lee Warner, Publisher to the Medici Society. 1912.
- Bible. [Biblia Latina.] Vol. 1. Leipzig. Der Insel Verlag. 1913. [A facsimile edition of the 42-line Bible, assumed to have been printed in 1453 and by some ascribed to Gutenberg as printer.]
- Bibliophile Society. Publications:—
- Burns, Robert. The Geddes Burns. [Poems, chiefly in the Scottish dialect. Edinburgh. MDCCLXXXVII.] [Boston. 1908.] Manuscript facsimile.
- Reprinted in facsimile from William K. Bixby's copy of the 1st Edinburgh edition, formerly presented by Burns to Alexander Geddes: with facsimiles of Geddes's book-plate and of an autograph letter and autograph poems of Burns. Inserted is a portrait of Burns by W. H. W. Bicknell.
- Keats, John. John Keats' unpublished poem to his sister Fanny, April 1818. Boston. 1909. Facsimiles. Portrait.
- Lamb, Charles. The letters of Charles Lamb, in which many mutilated words and passages have been restored to their original form 5 v. Boston. 1905.
- Shelley, Mary Wollstonecraft. Romance of Mary W. Shelley, John Howard Payne and Washington Irving. Portraits. Engraved title-page. Boston. 1907.
- Thoreau, Henry D. Walden: or, life in the woods. Portrait. Plates. Facsimile. 2 v. Boston. 1909.
- Edition limited to 483 copies. The original manuscript of the above is in the collection of Mr. W. K. Bixby.
- Bibliophile Society. Tenth Year Book, 1911. Engraved title-page. Boston. 1911. Edition of 500 copies.
- Bibliophile Society. Eleventh Year Book, 1912. Boston. 1912. Edition of 500 copies.

- Boston Aqueduct Corporation, 1795. Original records of. The President's and Directors' records. A corporation formed for bringing fresh water from Jamaica Pond to Boston:—Records of meetings of the Corporation from the beginning, to the time of the transfer to the City of Boston, 1851. 2 v.
- Brabourne, (Lord), and Charles Chubb. The birds of South America. V. 1. Colored plates. London. Porter. 1912.
(To be published in 16 volumes.)
- Broadside. An humble intercession for the distressed Town of Boston, Now almost deserted by its former rightful inhabitants, many of whom have fled, chusing to take refuge in the woods and caves, for the sake of liberty, rather than to live in splendor and affluence among slaves and tyrants. . . . Salem. Printed by E. Russell. . . . 1775. [Verse.]
Two column broadside with woodcuts at the top. The poem in the right-hand column reads "A new liberty song. Composed at the Camp Prospect Hill, August, 1775."
- Cescinsky, Herbert. English furniture of the eighteenth century. Illustrated from drawings by the author and from photographs. 3 v. London. 1911.
- Demaison, Louis. Album de la cathédrale de Reims. 2 v. Reims. 1902. 300 plates.
- Dennis, John. A defence of Sir Fopling Flutter, a comedy. . . . By Sir George Etheridge . . . London. (1722.) [An attack on Sir Richard Steele.] For Brown Dramatic Collection.
- Egger, Hermann. Römische Veduten. Handzeichnungen aus dem XV-XVIII. Jahrhundert. Band I. Wien. [1911.] 115 plates.
- Euclid. Euclidis megarensis philosophi acutissimi mathematicorum omnium sine controversia principis opaa Campano interprete fidissimo tralata. . . . Colophon: Venetiis impressum . . . MDVIII. [Title printed in red and black.] For Bowditch Collection.
- Geiler von Kaisersberg, Johann. Sermoes Prestantissimi sacrarum literarum Doctoris Joanis Geilerii Keiserspergii Cotionatoris Argentinensifruetuossissimi de tepore & de setis accomodandi. . . . Colophon . . . [Strassburg. 1515.] F°. Gothic letter.
- German Classics, The. Edited by K. Francke and W. G. Howard. New York. German Publication Society. (In 20 volumes.) V. 1-5.
- Horsburgh, Boyd Robert. The game-birds & water fowl of South Africa. London. 1912. Colored plates.
- Leisching, Julius. Schabkunst. Ihre Technik und Geschichte in ihren Hauptwerken von XVII. bis zum XX. Jahrhundert. Wien. 1913.
- Longfellow. The song of Drop-o'-Wather, by Harry Wadsworth Shortfellow (Mary Cowden Clarke). London. 1856.
The song of Milgenwater. Translated from the original Feejee, by Marc Antony Henderson. Cincinnati. 1856.
Hiawatha, or ardent spirits and laughing water, a musical extravaganza. Also, two autograph letters of Longfellow relating to his books, the parodies and translations. For Artz Collection.
- Lowell, James Russell. The Biglow papers. Second series. London. 1865.
A rare edition published two years previous to the first American edition. For Artz Collection.
- Martin, Camille. L'art roman en France: L'architecture et le décoration. 2 v. Paris. 1910, 1911.
- New England Primer, improved, for the more easy attaining the true reading of English. To which is added the Assembly of Divines and Mr. Cotton's catechism. Boston. Printed and sold by Nathaniel Coverly, in Newbury Street. 1762.
- New England Primer, improved, or, an easy and pleasant guide to the art of Reading to which is added The Assembly's catechism. Adorned with cuts. Boston. Printed by Benjamin True. No. 73 State St.
- Pennsylvania Evening Post, Jan. 2, 1776 to Dec. 28, 1776. Containing the first appearance in print of the Declaration of Independence, issue of July 6.

- Shakespeare. Works. 10 volumes. Edited by A. H. Bullen, Stratford-upon-Avon. Shakespeare Head Press. 1904-07.
- Smith, William. The history of the Province of New York, from the first discovery to the year MDCCXXXII to which is annexed a description of the Country, with a short account of the inhabitants. London. 1757.
- Trésor de l'art belge au XVII siècle. Memorial de l'Exposition d'art ancien à Bruxelles en 1910. 2 v. Bruxelles. 1913.
- Turrell, Charles. Miniatures: a series of reproductions in colour & photogravure of ninety-eight miniatures of distinguished persons, including Queen Mary, Queen Alexandra . . . with an introduction by George C. Williamson. London. 1913.
- Unicorni, Giuseppe. De l'arithmetica universale . . . Parte prima, seconda. In Venetia . . . 1598. For the Bowditch Collection.
- Vallance, Aymer. The old colleges of Oxford. Their architectural history illustrated and described. Illustrations. Plates. Plans. London. Batsford. (1912.)
- West, Mrs. George Cornwallis-, editor. 1616-1916. Shakespeare Memorial Souvenir of the Shakespeare Ball. Published for the Committee by F. Warne & Co. London & New York. [1913.] (The portraits, many of them colored, show the historical costumes worn at the ball which was held in support of the Shakespeare Memorial Fund.)
- Whitman, Walt. The complete writings of . . . issued under the editorial supervision of his literary executors. 10 v. London. 1902. The Book-Lover's Camden edition. For the Artz Collection.

The following books, bought for the Brown Music Collection, were secured at the Sotheby and Anderson Sales:

- Calliope, or English harmony. A collection of the most celebrated English and Scots songs, engraved throughout with frontispieces and 400 beautifully engraved head-pieces representing the subject of each song. 2 v. in 1. Bound in morocco by F. Bedford. (1739.)
- Lyon, James. Urania: or, A choice collection of Psalm tunes, anthems, and hymns . . . to which are prefixed the plainest and most necessary rules of Psalmody. Engraved title and music by Henry Dawkins. Philadelphia. 1761.
- New Calliope, The, or English harmony in taste. A collection of celebrated songs and cantatas by the most approv'd masters. Volume the first (all published) containing 100 airs with transpositions for the flute, engraved throughout, with an engraving adapted to each song, and frontispiece. In original calf. Roberts. 1743.
- Playford, H. Harmonia Sacra: or, Divine hymns and dialogues, with a thorough-bass for the Theorbo-lute, Bass-viol, Harpsichord, or organ. London. W. Pearson. 1714.
- Pleasant Musical Companion, The: being a choice collection of catches, for three and four voices. Composed by Dr. John Blow . . . and other eminent masters. The tenth edition, corrected, and several new catches. London. J. Johnson. (N.d.)
- Syren, The. Containing a collection of 430 of the most Celebrated English songs, nine of which are contain'd in the Collection of the same size, call'd the Nightingale. Second edition, with the addition of many new songs. London. Osborn. 1738.
- Universal Harmony, or, the Gentleman and Ladies Social Companion: consisting of a great variety of the best . . . English and Scots songs, cantatas, etc. Engraved throughout. London. Printed for J. Henry . . . 1745.
- Universal Musician: or Singster's delight, consisting of the most celebrated English and Scotch songs, favorite cantatas, etc., designed for the entertainment of lovers, country sportsmen, jovial companions, etc. V. 1 (all published). London. W. Raynor. 1738.

Especial attention has been paid to the acquisition of books relating to architecture and city planning.

There have been acquired collections of Bohemian literature (in the Bohemian language) and of books in Polish, Swedish, Yiddish and Italian, the Yiddish and Italian collections being principally translations from English works adapted to the needs of the North End Branch.

Gifts.

The gifts received during the year from 3,595 donors numbered 10,858 volumes, 23,939 serials, 1,141 photographs and 80 newspapers. The following list represents the gifts of especial importance; except as otherwise noted, the givers are residents of Boston:

- Andersen, Hendrik Christian, Rome, Italy. Creation of a world centre of communication. By Hendrik Christian Andersen. Paris. 1913. English edition. Folio. Plates. Plans. Maps.
- Barny, Everett Hosmer, Springfield. Everett Hosmer Barney — A record of his life work. George Murray Barney. (Compiled by Frederick William Adams.) Springfield. 1912. Privately printed. Illustrated. Portraits. Plates. Facsimiles.
- Benton, Josiah H. Twenty-seven bound volumes, 52 unbound pamphlets and serials and 46 large framed photographs of the Tyrolean Mountains.
- Bixby, W. K., St. Louis. Facsimiles of Swinburne manuscripts.
- Bradley, Mrs. Leverett. Portrait of Dr. Johnson by Sir Joshua Reynolds. (Copy of the portrait in the National Gallery, London.)
- Brown, Allen A. Seventy-six volumes of music.
- Case, Mrs. James B. One hundred and thirty-nine pamphlets, reports, and 76 numbers of periodicals.
- Cheney Brothers, So. Manchester, Connecticut. Cheney silk exhibits. Twelve sets of charts illustrating the process of silk manufacture. (Placed in the Central Library and Branches.)
- Collins, Frank S., Malden. Two hundred and seventy-one volumes, including music, text books and Bibles, 21 numbers of periodicals and 31 engravings.
- Crowninshield, Francis B. The story of George Crowninshield's yacht Cleopatra's Barge, on a voyage of pleasure to the Western Islands and the Mediterranean, 1816-17. Compiled by Francis B. Crowninshield. Boston. Privately printed. 1913. Portraits. Maps. Facsimiles.
- Davis, Simon. Two hundred and one volumes, chiefly text books and including Appleton's Cyclopædia in 16 volumes.
- Eliot, The Misses, Cambridge. Ames' Almanack for 1775 and 1777; Poor Richard Almanac. 1764. Printed by B. Franklin; Weather-wise's Almanack for the year 1789; A mournful lamentation for the death of Mr. Old Tenor, who expired the 31st. day of March, 1750. (Broadside.)
- Freer, Charles L., Detroit, Michigan. Facsimile of the Washington Manuscript of the Four Gospels in the Freer Collection in the University of Michigan.
- Hannigan, W. T. Two hundred and fifty-six volumes, government and law documents.
- Harvard University, Cambridge. One hundred and ninety-two pamphlets, catalogues and reports.
- Hersey, Miss Heloise E. Sixty-two volumes, miscellaneous works, including three volumes of the Vassarion.
- Italian Consulate, The, New York City. A large wall map of Italy for the North End Branch.
- Jeffries, Miss Marian S. Two hundred bound volumes, 133 unbound volumes, 132 numbers of periodicals, chiefly Littell's and Boston Symphony Orchestra programs, and 202 unmounted photographs.

- Kellen, William V. One hundred and fifty-six photographs of views of Italian cities, including those of Palermo, Messina, Naples, Pompeii, Florence and Rome.
- Kilham, Walter H. One hundred and seventeen lantern slides. Subjects:— Boston, France, Spain and historic ornament.
- Knapp, George B. A collection of old playbills, theatre and concert programmes.
- Lee, William H. Deaths in the dramatic and musical professions 1901–1912. Compiled by William H. Lee. 2 volumes. (Collection of newspaper clippings bound.)
3437 cartoons of the Presidential campaign of 1912. Collected and mounted by William H. Lee.
- Metropolitan Museum of Art, New York City. Catalogue of a loan exhibition of paintings by old Dutch masters, held at the Metropolitan Museum of Art in connection with the Hudson-Fulton Celebration, 1909. By William R. Valentiner. Edition de Luxe.
- Morgan, J. Pierpont, New York City. Babylonian Records in the Library of J. Pierpont Morgan. Part 1 & 2. Edited by Albert T. Clay.
- Norton, Mrs. Jacob. One hundred and twenty-five volumes, a miscellaneous collection, and 13 volumes of Puck.
- Oliver Ditson Company. Fifteen pieces of new music.
- Peabody, Miss C. E., Cambridge. Four hundred and forty-six theatre and concert programs.
- Powers, J. H., Bureau of University Travel. Forty-seven photographs of works by Ghiberti, Velasquez, Turner, Michelangelo and others.
- Preston, William Gibbons, Estate of, through James Calderwood, Executor. Fifty volumes of architectural plans, drawn by W. G. Preston. (These include many of the commercial buildings in Boston.)
- Richards, Dr. George E. Fifty-six volumes, including fourteen volumes of "Der Salon," lacking in the Library set, and 32 volumes of Spanish, Italian, French and German literature.
- Ross, Mrs. Waldo O. Forty volumes, miscellaneous works, including nine bound volumes of Country Life, also 415 numbers of periodicals, McClure's, Country Life, The Christian Register and the World's Work.
- Sampson & Murdock Co. Directories of various cities and towns of the United States and Canada. 345 volumes.
- Sears, Herbert M. Ninety-two publications of the Chaucer Society.
- Stone, Miss Ellen, Lexington. A collection of old theatre and concert programs, periodicals and newspapers.
- Walcott, George H. Fifty-six volumes, unbound, and 103 numbers relating to chess.
- Warren, Miss Bessie E. Two hundred and twenty-four volumes, chiefly documents and reports, 2,200 periodicals and 400 newspapers.
- White, Smith Music Publishing Co. Sixty pieces of new music.
- Women's Education Association. Seventy-nine volumes of Italian literature for the North End Branch.

For the Teachers' Reference Collection the following publishers have contributed text books published by them, in use in the Boston Public Schools:

- Allyn & Bacon. Sixteen volumes.
- Atkinson, Mentzer & Company. Sixteen volumes.
- Beattys, Frank D., & Co., New York City. Seven volumes.
- Ginn & Company. Two hundred volumes.
- Gregg Publishing Company, New York City. Fourteen volumes on shorthand instruction.
- Harper & Brothers, New York City. Three volumes.
- Holt, Henry, & Company, New York City. Twelve volumes.
- Houghton, Mifflin Company. Twenty-two volumes.

Jenkins, William R., Company, New York City. Twenty-one volumes, French and Spanish text books.

Lippincott, J. B., & Co., Philadelphia. Three volumes.

Little, Brown & Company. Thirty-four volumes.

Macmillan Company, The, New York City. Fourteen volumes.

Charles Scribner's Sons, New York City. Forty-three volumes.

Thompson Brown Company. Twenty-three volumes.

THE CATALOGUE DEPARTMENT.

During the year 57,664 volumes and parts of volumes, covering 37,306 titles, have been catalogued under the direction of Mr. S. A. Chevalier, chief of the Catalogue Department. The disposition of these volumes and titles is shown in the following statement, which also permits a comparison with the preceding year:

	1912-13.		1913-14.	
	Volumes and Parts.	Titles.	Volumes and Parts.	Titles.
Catalogued (new):				
Central Library catalogue.....	19,270	13,352	17,422	12,244
Serials.....	6,069		6,687	
Branches.....	14,872	13,612	17,624	15,594
Re-catalogued.....	22,881	11,888	15,931	9,468
Totals.....	63,092	38,852	57,664	37,306

There have been added to the catalogue cases throughout the system 164,535 cards, the number added to the catalogue cases in the Central Library being 154,813. In order to obviate inconvenience on account of the unavoidable delay in filing the printed cards for new purchases, a temporary card, cataloguing the books under the name of the author, is placed in the Bates Hall catalogue cases within a few days after the receipt of the volumes.

In addition to the current work of cataloguing, a large number of subject headings in the public catalogues have been revised, divided and made more convenient for public use. Many of the old cards in the Bates Hall cases carrying titles cut from the old printed indexes have been replaced by new printed cards, fuller in their descriptive matter; and this work will be carried still farther by the department during the coming year. Eventually all these old cards will be eliminated.

The important catalogue of the works in the library relating to architecture and allied subjects is in type, and the completed volume will be issued during the coming summer. A printed catalogue of the Allen A. Brown Dramatic Collection is in process. In the Catalogue Department, also, several valuable bibliographical lists have been compiled during the year, and various items of bibliographical information furnished through correspondence to patrons of the library.

In the transfer of duplicate volumes from the library, for sale on exchange account, the services of expert cataloguers are required in comparing the editions of the duplicates in order that the most valuable and perfect copies may be retained. Frequently, in addition to the comparison of the volumes, changes in all the records of the titles are required, and during the progress of this work, and in other examinations of the shelves, many works in the general collection have been transferred to special collections for greater safety and convenience of access. In all such cases new numbering and new records are necessary, and all this work, performed in regular course by the Catalogue Department, does not admit of statement in statistical tables.

SHELF DEPARTMENT.

The usual Shelf Department statistics are presented below, from the report of Mr. W. G. T. Roffe, in charge:

Placed on the Central Library shelves during the year:

General collection, new books (including continuations)	17,701
Special collections, new books	6,704
Books reported lost or missing in previous years, but now found, transfers from branches, etc.	771
	25,176

Removed from the Central Library shelves during the year:

Books reported lost or missing, condemned copies not yet replaced, transfers, etc.	7,339

Net gain at Central Library	17,837
Net gain at branches and reading-room stations	255

Net gain, entire library system	<u>18,092</u>
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The total number of volumes available for public use at the end of each year since the formation of the library is shown in the following statement:

1852-53	9,688	1883-84	438,594
1853-54	16,221	1884-85	453,947
1854-55	22,617	1885	460,993
1855-56	28,080	1886	479,421
1856-57	34,896	1887	492,956
1857-58	70,851	1888	505,872
1858-59	78,043	1889	520,508
1859-60	85,031	1890	536,027
1860-61	97,386	1891	556,283
1861-62	105,034	1892	576,237
1862-63	110,563	1893	597,152
1863-64	116,934	1894	610,375
1864-65	123,016	1895	628,297
1865-66	130,678	1896-97	663,763
1866-67	136,080	1897-98	698,888
1867-68	144,092	1898-99	716,050
1868-69	152,796	1899-1900	746,383
1869-70	160,573	1900-01	781,377
1870-71	179,250	1901-02	812,264
1871-72	192,958	1902-03	835,904
1872-73	209,456	1903-04	848,884
1873-74	260,550	1904-05	871,050
1874-75	276,918	1905-06	878,933
1875-76	297,873	1906-07	903,349
1876-77	312,010	1907-08	922,348
1877-78	345,734	1908-09	941,024
1878-79	360,963	1909-10	961,522
1879-80	377,225	1910-11	987,268
1880-81	390,982	1911-12	1,006,717
1881-82	404,221	1912-13	1,049,011
1882-83	422,116	1913-14	1,067,103
Volumes in entire library system			1,067,103
In the branches and reading-room stations			253,570

These volumes are located as follows:

Central Library	813,533	Roslindale (Station B)	6,798
Brighton	18,900	Mattapan (Station D)	885
Charlestown	15,055	Neponset (Station E)	1,018
Dorchester	19,526	Mt. Bowdoin (Station F), ...	4,367
East Boston	16,259	Allston (Station G)	1,493
Hyde Park	26,195	Codman Square (Station	
Jamaica Plain	15,008	J)	4,786
North End	3,774	Mt. Pleasant (Station N), ...	1,600
Roxbury Branch:		Broadway Extension	
Fellows Atheneum	29,042	(Station P)	3,113
Owned by		Warren Street (Station	
city	8,229	R)	1,466
Total, Roxbury Branch	37,271	Roxbury Crossing (Sta-	
South Boston	17,426	tion S)	1,229
South End	15,985	Boylston Station (Sta-	
Upham's Corner	8,012	tion T)	1,405
West End	17,129	Orient Heights (Station	
West Roxbury	8,758	Z)	1,788
Lower Mills (Station A)	792	City Point (Station 23)	2,459
Net gain at Central Library		Parker Hill (Station 24), ...	1,073
Net gain at branches and reading-room stations			17,837
			255
Net gain, entire library system			<u>18,092</u>

CHILDREN'S DEPARTMENT — CENTRAL LIBRARY.

Besides the provision which the library makes for children at the branches, the Children's Reading Room at the Central Library serves youthful readers from every part of the city. Its large collection of juvenile books on open shelves arouses their interest, and the general attractions of the beautiful central building are also influential in promoting the large use of this department. The trained attendants in the department are continually employed in helpful service, showing the children how the books may be found, the way in which the catalogue may be used, and in other ways aiding in extending the knowledge of the library among these young readers. Certain phases of the work of the department are thus referred to in the annual report of Miss Alice M. Jordan, the custodian:

. . . It has its place as a pleasant resort in leisure hours, a friendly encouragement toward forming a reading habit. It serves also as an introduction to a general use of libraries, making them more accessible because of this early association. Evidence that this has been the effect upon children who have left this city for other homes is received by our hearing of their prompt connection with other libraries. What is gained by association with the dignity and beauty of the building, by the inspiration of ideals gathered from books here, cannot be measured.

Service is rendered to the community by this department in other ways than in providing a reading room for children. From its beginning it has been drawn upon to furnish information on educational topics to investigators in various pursuits. Demands of this kind increase each year. An increasing number of requests for help in choosing books for children's ownership is noticed with satisfaction. For this purpose, the collection of special editions of children's classics has a wide sphere of usefulness. It is also greatly appreciated by art students, illustrators and designers. From the collection of pictures, 2,073 were circulated to teachers and pupils during the year. In this work a type of picture different from that provided in the Fine Arts Department is used, thus avoiding duplication of work.

The special collection of books in this department is drawn upon for issue through the branches, 14,861 volumes having been lent in this way during the year, besides the general issue direct to readers for home use.

No part of the library excites greater interest on the part of the distinguished visitors from abroad who from

time to time come to the library. It is noticeable to them that, with attendance voluntary, so many children wish to read here.

BATES HALL.

The use of Bates Hall, the principal reading room at the Central Library, continues to increase. The Chief of the Reference Department, Mr. Oscar A. Bierstadt, remarks:

No attempt is made to count the many thousands of volumes brought from the stacks to be used by students at the reading tables. The 9,000 reference books on the open shelves of the hall are consulted more than any other works in the entire library system, and it would be impossible to keep a complete record of this use. Consequently there is lack of statistics to show the quantity of work done here. In quality it is even more remarkable. If one could inspect what is in use by the readers it would be surprising to note how few volumes of light literature are in hand and how many serious works are aiding in the advancement of learning. Readers of fiction usually take their books home, while students frequent Bates Hall. The attendants are called upon for help on a great variety of subjects, and the amount of reference work is constantly increasing. In calling for books during the year readers used 575,000 hall use and 255,000 home use slips, a total of 830,000 slips.

THE SPECIAL LIBRARIES.

Under the name of special libraries are grouped the special collections on the upper floor of the Central Library. These include the books relating to the Fine Arts, Architecture and the allied subjects of design and building technique; the Allen A. Brown Music Collection; the Barton-Ticknor Room, in which are placed the Barton Collection of Shakesperiana, the George Ticknor Collection of Spanish literature, the Allen A. Brown Dramatic Library and many special collections.

The valuable books in this group are especially used by scholars and students engaged in literary research. Many of the volumes can be found in no other library in this country, and the reading tables in the Barton Gallery are in constant use under reservation by authors, educators and others who find in this retired reading room the quiet and privacy necessary to their work. In the Fine Arts Reading Room the tables are usually fully occupied, and the considerable number of books on open shelves are freely used, as in Bates Hall. The

West Gallery leading from this reading room is especially devoted to reservations for classes from the schools of art and design, to various other study classes, and to conferences in connection with the University Extension Courses. In the Allen A. Brown Music Room students of music find material obtainable in no other place. The entire work of the special libraries is in the highest sense educational, and the training and experience of the attendants is an essential element in the effective public service which is given in these rooms.

A statistical record can indicate the use of these various departments, but, as in other parts of the library, cannot fitly portray the wide-reaching influence of the use of the books, nor the personal assistance in selection given to readers, who are also students and who must be directed to the best sources. Without this assistance the best books would often remain unused upon the shelves. The miscellaneous activities of the special libraries are also extensive, as will be seen from the summary below.

The total number of volumes in the special libraries is now 139,198, the net accessions for the year being 4,072. The Allen A. Brown Dramatic Collection, numbering 4,372 volumes, now included in the special libraries, is an extremely valuable addition to the resources of the library, and when its printed catalogue is completed will no doubt receive the attention it deserves.

The number of photographs and photo-print pictures of various kinds added to the Fine Arts collection during the year is 6,107; the total number now being 41,329. Some of these are still in process of preparation for use by mounting, titling, etc. A rough, but comprehensive catalogue of the circulating collection has been printed and distributed to teachers and others through the Branch Department. The use of the picture collection is increasing.

The library has gradually acquired a collection of lantern slides, brought together principally for use in our own lecture courses, but available for lending, under proper restrictions. The total number is now 4,406, and during the year 2,662 slides have been lent to 83 borrowers. Among the slides acquired during the year are 111, illustrating the scenery of France and Spain, given to the library by Mr. W. H. Kilham.

The statistical record, as reported by Mr. Frank H. Chase, custodian, follows:

FINE ARTS DEPARTMENT.

The direct circulation of books for home use from this department (included in the statement of total circulation, page 37) was 20,668, as compared with 19,752 for the preceding year. Pictures (illustrating history, geography, fine arts, etc., for educational work) have been sent to public and private schools, and to clubs and classes, and for other similar uses, as follows:

Borrowers.	Portfolios Issued.
Public schools	2,044
Private schools	18
Clubs	17
Classes	14
Sent to branches for exhibition or study	263
Miscellaneous	155
	2,511

The total may be compared with 2,473, the number of portfolios circulated under the same classification in the preceding year.

BARTON-TICKNOR ROOM.

Barton-Ticknor books issued	12,864
Maps issued	933
Books from other departments, issued for readers in this room	6,319

ALLEN A. BROWN MUSIC ROOM.

Volumes issued for use, 9,755. Volumes added to the collection, 303, of which 88 were given by Mr. Brown.

The important additions include: Mraczek's *Symphonische Burleske über Max und Moritz*; Noren's "Vita" *Sinfonie*; Stravinski's *suite, L'oiseau de feu*; Messenger's *Madame Chrysanthème*; several early English song books of the first half of the eighteenth century; and Playford's *Ayres and Dialogues* (London, 1714).

MISCELLANEOUS ACTIVITIES OF SPECIAL LIBRARIES.

Visits of Classes.

The total number of meetings held by classes and study clubs, by arrangement with the Fine Arts Department, during the year was 164, with an attendance of 1,427 students or members. The University Extension Conferences brought together an estimated number of

1,100 students; or under the two heads named, a total of 2,527, as compared with 2,456 under the same classification during the preceding year.

LECTURES AND EXHIBITIONS.

The free public lectures given in the Central Library Lecture Hall during the year, and the exhibitions in the Fine Arts Exhibition Room (many of which are given in connection with the lectures) are enumerated in the following list, which also includes the exhibitions given in the rooms opening from the Entrance Hall on the first floor:

Lectures.

1913.

- January 16. The Land of the Montezumas.* Dr. Francis Henry Wade.
- January 19. Types of Modern Drama. III. Frank W. C. Hersey.
- January 22. Children as Theatre-Goers. Edward Vroom. (Under the auspices of Fathers and Mothers' Club.)
- January 23. The Hawaiian Islands. Past and Present.* Frank Herbert Palmer.
- January 26. The Making of Americans.* Dr. George W. Tupper.
- January 30. Whaling Ventures and Adventures.* George H. Tripp.
- January 31. Roman Africa.* Prof. Gordon J. Laing. (Under the auspices of Archæological Institute of America.)
- February 2. The Short Story. With illustrative selections. I. Horace G. Wadlin.
- February 6. Savonarola.* Rev. Thomas I. Gasson, S. J.
- February 9. The Opera. V. Verdi and the Latter-Day Italians. Olin Downes.
- February 10. The Islands of Japan.* Harvey N. Shepard. (Under the auspices of Field and Forest Club.)
- February 13. The Construction of the Panama Canal. Louis K. Rourke.
- February 16. Reading: Maeterlinck's Blue Bird. Helen Weil.
- February 20. Knights and Knighthood.* Rev. Thomas I. Gasson, S. J.
- February 23. Types of Modern Drama. IV. Frank W. C. Hersey.
- February 26. Egypt.* Edgar A. Carleton. (Under the auspices of Museum of Fine Arts.)
- February 27. Charms of the White Hills.* George N. Cross.
- March 2. The Short Story. With illustrative selections. II. Horace G. Wadlin.
- March 6. Pompeii and Amalfi.* Louis C. Newhall.
- March 9. Robert Louis Stevenson. E. Charlton Black, LL.D.
- March 10. The Land of the Magyar.* Arthur Stanley Roberts. (Under the auspices of the Field and Forest Club.)
- March 13. A Summer Vacation in Europe with a Camera.* Henry Warren Poor.
- March 18. The Opera. VI. Modern French Operas. Olin Downes.
- March 27. Manual Training To-day.—What it is and What it does.* John C. Brodhead.
- March 28. The Development of the General Type of the Theatre interior.* Hugh Tallant. (Under the auspices of American Drama Society.)
- March 30. King Arthur — the Evolution of a Hero. Frank H. Chase.
- April 3. The Land of the Incas.* (Peru and Bolivia.) Cav. L. Melano Rossi.

Lectures whose titles are marked with an asterisk () were illustrated by the stereopticon.

- April 7. Constantine the Great; the Transformation from Paganism to Christianity. Rev. Walter Lowrie. (Under the auspices of Archæological Institute of America.)
- April 10. The Nibelungenlied.* Dr. Helen L. Webster.
- April 13. A Summer Vacation in Europe with a Camera.* Henry Warren Poor. (Repeated from March 13 by request.)
- April 14. Australia and its People.* Lionel H. Lehmeier. (Under the auspices of Field and Forest Club.)
- April 17. Froebel and his Influence on Handicraft.* James Frederic Hopkins.
- April 24. Constantinople.* Arthur Stoddard Cooley, Ph.D.
- April 26. Esperanto: the International Language. Edmond Privat. (Under the auspices of Boston Esperanto Society.)
- May 1. Joan of Arc.* Rev. Thomas I. Gasson, S. J.
- May 12. Camping in the Yellowstone National Park.* Edmund A. Whitman. (Under the auspices of Field and Forest Club.)
- October 12. Holland and the Art of Rembrandt.* Minna Eliot Tenney.
- October 14. In and Around the Chinese Seas.* Herbert D. Heathfield. (Under the auspices of Field and Forest Club.)
- October 16. Christopher Columbus, the Discoverer of America.* Rev. Thomas I. Gasson, S. J.
- October 19. Color in Dress. Mrs. Ruth Butts Carson. Illustrated with flowers, fabrics and dolls.
- October 23. Styles of Architecture.* C. Howard Walker.
- October 26. The Civil War.* John Kennedy Lacock.
- October 30. Picturesque Philippines.* Lieut. Edward O'Flaherty.
- November 2. With Liszt in Weimar. Lecture Recital. John Orth.
- November 4. Esperanto; the Elements and Progress of the International Language. D. O. S. Lowell.
- November 6. Rhodesia.* Horace Philip Salmon.
- November 9. The Wild Pets of the North Woods.* Dr. Edward Breck.
- November 10. Welfare Work for Wild Birds.* Winthrop Packard. (Under the auspices of Field and Forest Club.)
- November 13. The Land of Shakespeare.* Edmund H. Garrett.
- November 15. Arts, Costumes, Customs, and Folk Lore of Italy.* Mrs. Ruth Butts Carson. (Under the auspices of Fathers and Mothers' Club.)
- November 16. Italian Opera. Old and New. Henry L. Gideon. With musical illustrations.
- November 20. New Brunswick; Scenes in the Land of the New England Loyalist.* A. T. Kempton.
- November 23. Democrats in Literature: Burns, Mark Twain, Kipling, Markham, Whitman. With illustrative readings. Anna Johnson, A.M.
- November 24. The Imperial Idea in Roman Art.* Mrs. Arthur Strong. (Under the auspices of Archæological Institute of America.)
- November 30. The Stage of To-day. I: The Structure of Plays. Frank W. C. Hersey.
- December 4. Raphael, the Decorator.* Mary Augusta Mullikin.
- December 7. The Ides of March and Pompey's Theatre. S. Richard Fuller.
- December 8. The Conquest of the Ocean.* Hon. Joseph A. Conry. (Under the auspices of Field and Forest Club.)
- December 11. Mexico.* Dr. Francis Henry Wade.
- December 13. Canadian Wonders.* Rev. Frederick W. Johnson, D. D.
- December 14. Old Almanacs. Nathan Haskell Dole.
- December 18. The Temple of Peace; Art and Scenery in Piedmont.* Cav. L. Melano Rossi.
- December 21. How to Listen to Music. I. With musical illustrations. Arthur M. Curry.
- December 27. Little Citizens of the World. Mrs. Anna Stevens Duryea. (Under the auspices of Fathers and Mothers' Club.)

Lectures whose titles are marked with an asterisk () were illustrated by the stereopticon.

December 28. The Stage of To-day. II: The Art of the Theatre.*
Frank W. C. Hersey.

1914.

January 1. Joan of Arc.* Rev. M. L. Fortier, S. J.

January 4. How to Listen to Music. II: Musical Architecture. With
musical illustrations. Arthur M. Curry.

January 8. Picturesque Nuremberg.* Martha A. S. Shannon.

January 11. The Sistine Chapel.* Harriette Hersey Winslow.

January 12. The Canadian Rockies, the Pacific Coast, and the Santa
Fe Country.* Guy Richardson. (Under the auspices of the Field
and Forest Club.)

January 15. How the Masters Drew.* Wilbur Dean Hamilton.

Exhibitions, Central Library.

A. In Fine Arts Department.

1913.

January 16. Mexico.

January 20. Hawaiian Islands.

January 27. Shipping Ports of New England.

January 27. Whaling Industry.

February 3. Florence.

February 10. Japan.

February 11. Panama Canal.

February 12. Portraits of Lincoln.

February 17. Knights and Knighthood.

February 21. Portraits of Washington.

February 24. White Mountains.

March 3. Pompeii and Amalfi.

March 13. Pictures appropriate to Easter.

March 13. Books and pictures illustrating the life of David Livingston.

March 27. South America.

April 7. Joan of Arc (collection of books, pictures, statues, and
other objects lent by Joan of Arc Statue Committee, New York).

May 16. Philippine Islands (collection of products, implements,
costumes and photographs lent by Miss A. D. Sloecum).

September 13. Books and pictures illustrating life of Giuseppe Verdi.

September 13. Paintings in American Galleries.

September 20. Early American books on banking.

October 8. Holland.

October 8. The Art of Rembrandt.

October 11. Canadian pictures.

October 11. The Parthenon.

October 14. Life of Christopher Columbus.

October 18. Rome and the Vatican.

October 27. Philippine Islands and Hawaii.

November 4. South Africa.

November 10. Shakespeare's England.

November 17. Canada.

December 1. Decorative work of Raphael.

December 15. Florence.

December 15. Turin.

1914.

January 5. Nuremberg.

January 5. The Sistine Chapel.

January 12. Drawings by Old and Modern Masters.

B. Street Floor Exhibition Room.

1913.

January 16. American Indians.

February 6. Greek and Roman Art.

* Lectures whose titles are marked with an asterisk (*) were illustrated by the stereopticon.

March 27. Dutch East Indies.
 May 29. Tyrolese Houses.
 August 11. Panama Canal.
 September 13. German Sanitaria for the State-Insured.
 November 14. United States (recent accessions).
 December 18. Paintings of Raphael.

BRANCHES AND STATIONS.

During the year covered by this report the branch system of the library has included thirteen principal branches and fifteen reading-room stations. The reading-room stations are really minor branches, differing from the branches proper only in size. In all of them there are small permanent collections of books, all of them have helpful relations with the schools in the immediate vicinity, from all of them applications for books from the Central Library are sent forward, upon the requests of card holders in the neighborhood, and the books are distributed from and returned to reading-rooms on such applications. The work performed in the reading-room stations differs from that in the branches only in degree. As pointed out in other reports, the larger part of the library circulation for home use is through the branch system, either directly or indirectly by means of Central Library books sent out through applications made at the branches and reading-room stations.

The subsidiary agencies of distribution supplied during the year through the branch system include 62 engine houses, 36 institutions of various kinds, and 139 public and parochial schools; in all, 265 agencies, as compared with 251 in the preceding year.

The following figures summarize the activities of the branch system and the cost of administration for the year:

	Volumes.
Circulation through the branches for home use (recorded also on page 37)	1,588,008
Gain, as compared with preceding year	108,000
Total cost of operation, chargeable against the city appropriation	\$124,318 12

The demand for books increases steadily, stimulated in part by the opening of new branch buildings, for example, the new North End Branch and the new building in Charlestown. The knowledge of what the library offers is constantly increasing, the cooperative work with schools and study classes, the use of books by various

clubs and the University Extension Courses,—these are important influences in enlarging the demand for books. Apart from the direct demand at the branches, there have been issued on borrowers' cards from the Central Library through the branch system 82,782 volumes during the year, as compared with 79,684 volumes in the preceding year, and the number would have been larger if the books had been on our shelves. The percentage of unsuccessful applications was 43. That is, 43 requests in every 100 were unsuccessful in obtaining any book, usually because at the time of application the book or books wanted were already in the hands of another borrower. No public library can undertake to supply all the books that are asked for immediately upon request, but a larger supply of certain books for which the demand is persistent would undoubtedly reduce the percentage of unsuccessful requests.

A summary of certain extracts from the reports of branch custodians made to Mr. Langdon L. Ward, Supervisor of Branches, and included in his annual report, indicates the demand for books, and shows some of the kinds of books asked for:

. . . We have received from the Central Library, upon request, books and pamphlets on minimum wage, Welsh and Irish folk music, telephonic formulæ, and the history of printing.

The gain of 709 in the Central issue is gratifying, but not so satisfactory when the larger number of requests for books is considered. The result is a disappointing percentage of unsuccessful cards.

The record of Central Library books received rises as the shelves in the children's room of the branch become empty. The number of cards requesting books sent to Central during the year was 3,439, a gain of 47 per cent. The number of books received was 3,290, a gain of 54 per cent. The percentage of unsuccessful applications was 19.1 per cent, an increase of six-tenths of 1 per cent. There were only 657 volumes received in response to the requests of adults.

The daily issue of books from Central, on application from the branch, is increasing. There were 710 more applications this year than last and 133 more volumes received.

The demands for books are as varied as our classification and through the issue from Central we are able to supply the requests for books we could not possibly have permanently in the reading-room.

Foreigners are coming in increasing numbers, especially Poles, who are now numerous. The first book asked for by an adult Pole was "A Life of George Washington." The children

of foreign parentage want English books, but adult foreigners want books in their own language.

The total circulation of 12,951 books sent on deposit from this branch was larger than ever before. Last year this circulation was 10,917 volumes. During the present year deposits have been sent to one reading-room, three engine houses, nine grammar schools, and seven primary schools; a total of twenty agencies with eighty-four teachers supplied. Some idea of the time and work spent in this field may be obtained when it is noted that 174 deposits have been sent out during the year, and that each deposit must be selected carefully, have its schedule written, have the book cards filed, be tied up in small bundles, and finally have each bundle properly tagged.

A large proportion of the requests for books on deposit from this branch have been received from teachers who have never before requested them. This work has apparently been stimulated by the letter sent from the library to the schools and by the "Guide to Aid Pupils in the Selection of Books" prepared by a committee of teachers.

Our deposit circulation increases with the growth of our deposit collection and the large gain achieved this year is of course small to what it might be if we were able to fill all requests received. There are 93 teachers in four of the schools in this district, all eager to have deposits. . . . The teachers of the upper primary grades are practically solicitous and for them we have nothing. They are of the opinion that classes of bright nine-year old children who have no library privileges need deposits more than all others.

We have located here a small collection of books in Bohemian which have surely been used during the year, but the demand for books in Lithuanian and Polish has been very great and there would be much more use for any number of books in both these languages if we had them.

Our boys request Indian stories, histories and fairy tales; our girls, stories about girls and fairy tales. We have frequent calls from adults for books on art, crafts, trades and civil government.

Seventeen years ago the collection at this branch numbered 13,145 volumes. Since then the total losses number 14,755 volumes, the accessions 18,339, and the volumes bound 24,036. The total of volumes is now 16,259. Thus the collection has been practically renewed once and rebound twice in that time. It includes:

	Volumes.
Books for the young	4,354
Fiction for adults	3,693
	8,047

These 8,047 volumes were issued 82,981 times, or more than 10 times each. In spite of replacement and rebinding, they

look shabby. It is evident that to keep pace with such wear, much more radical measures must be employed. Of course, their shabbiness would be even more apparent by contrast with a new building. Indeed, the first question the people ask in looking forward to a removal to a new building is apt to be "Will you have all new books?" It is evident that they care much more about the books than about the building.

We are feeling as always the lack of books and especially of suitable books. The trend of education is changing. Things are being viewed more from a commercial and statistical point. Not one child has asked for the "Natural Wonders of the United States" this year, but nearly every one has wanted something on Panama, tariff, harbor, shipping and industries.

One important feature of the branch work, as indeed of all library work, is the personal assistance given to readers by the library staff. In any city containing a large number of persons of untrained literary taste, who have not long had an opportunity to use books, this personal influence is essential. Without it the library can never fulfill its highest function, the cultivation of the love of books and the extension of their proper use. This is especially true in districts served by some of our branches, largely populated by those who have recently come here from abroad. The results of this personal influence cannot be expressed in figures. Figures are cold and lack the human element, which is never absent from the effective operation of any large public library. Interesting incidents reported by branch custodians illustrate it:

The adults' room is used by intelligent and ambitious men (women are in the minority), mechanics, carpenters, clerks, laborers and students; and students come night after night. Loafers do not come, the room is too light and clean and open to view to attract them. Our Italian patrons are fairly well educated. They desire books in Italian by Italian authors. With regard to our Jewish patrons I quote from some notes made by one of our attendants: "A young man, a student who comes here, brought a friend to the library the other evening. This friend was a young Russian Jew, a student of electrical engineering, who had arrived in America that day. Our young friend introduced him to me and said: 'I brought him to the library first, because I wanted to show him what advantages American libraries offer to the student.' I addressed the young man in Yiddish, using the universal Jewish welcome: 'Peace be unto you. From whence cometh a Jew?' I never saw a more surprised person. For a moment he couldn't answer me. Then he said, 'Is it possible that in America they

even employ Jews in public places and that these same Jews are neither afraid nor ashamed to speak Yiddish?' I then explained to him that in America officials worked for and with the public rather than as in Russia, the public for the officials." . . . I sent "Uncle Tom's Cabin" in Yiddish to a grocer a short time ago. He was much surprised to hear that we had Yiddish books. At once he told his friends, and in a few weeks the book mentioned had circulated eighteen times.

Our constituency still includes all nationalities and languages. Indeed, we need to be polyglots to serve the people adequately. Three of our force are studying French, one German, and one Italian. Attempts to practise strange tongues on those to whom they are native brings out a joyous flood of language in response, quite bewildering to unaccustomed ears. There is a steady demand for books in Italian and German especially. The general demand is from persons of all ages for a very wide range of subjects. Considerable time was spent one afternoon trying to find in print the motto of the French Revolution, known, of course, to the one questioned, but verification wanted from a book. Over the telephone come questions such as "What famous man was born in 1756?" and "Why was Hartford, Conn., called the Charter Oak City?" The number of parochial school children coming for reference work and cards has increased perceptibly. This is probably due to the list of books by Catholic writers distributed in some of the churches.

Our readers come to us for much more than the books which we give them — for advice, for sympathy, for help in many ways. They feel that we are their friends, and always, our knowledge of our readers grows, and we are better able to understand their requirements, and to give them the personal help, in recommending and directing their reading, that means so much. In our district at least ten different types are well represented — Poles, Greeks, Russian Jews, Swedes, Syrians, Italians, French, Scotch, Chinese, Americans and a smaller sprinkling of Germans. And that the adult non-English speaking foreigner does not come to us for books is often because he is illiterate and has not learned to read his own language. The children, however, do come, and our books are carried into their homes and have an influence in molding their characters and in their outlook on life.

Under the heading "Books for New Americans" we grouped all the readers for foreigners, and on the first Sunday after they were so placed five were issued. We are apt to make the mistake of thinking that those who come to the library have the knowledge of books that we possess, but they do not. To many people a catalogue is merely a collection of names. Paragraphs calling attention to certain books and book lists have been published in the local paper almost every week. These are some of the headings used:

A little list of profitable essays.	Dorchester.
Books of practical interest to amateur artists.	Books for European tourists.
Books of practical interest to men engaged in various occupations.	Good stories for a hot day.
Books that answer "How."	Brief books for a railroad journey.
Books on vocational guidance.	Books for a camping trip.
Books on gardening.	Books on nature.
Books on adventure, travel and action.	Clifton Johnson's books.
Novels of humor.	Mexico.
Books in connection with the Aliens Bill in California.	Columbus.
Memorial Day.	Books for parents who are interested in better children.
Boston.	Books on civic pride, civic housekeeping, civic opportunities, etc.

Attention is also called to the new books and to good articles in the current magazines.

The library is greatly appreciated by these people and they are eager to grasp all the opportunities for improving themselves. Books to them are valuable, the library means to them "education," and it is evident how much help they derive from the use of the books and periodicals they are able to get through the library. Not unusual is the case of a Russian Jew, who, on his first visit to the library, brought an interpreter to aid him in obtaining a card, and who, in a very short time afterward, asked for some of the "best English books."

Although reference work of the highest grade, such as is required by students of the higher schools and colleges and by persons generally who are engaged in extended literary research, is concentrated at the Central Library, on account of its scholarly collections of books and the opportunity which it offers for serious study, nevertheless the elementary reference work at the branches constantly increases. This is shown in the following extracts condensed from reports of custodians:

That the excellent reference collection is appreciated is attested by its constant use by school children, high school pupils, normal students and adults (including teachers, club members, lecturers). A number of volumes have been recommended during the year to keep pace with the demand for books on natural science, scientific and government department subjects. Our reference work is broadening and is becoming more technical, due to the more general attendance at the schools of commerce and to the University Extension Classes.

Of the 349 volumes reserved for reference use on special shelves, 64 were selected at the request of the superintendent

of the Hebrew Sunday School during the summer vacation. They were called for and issued to adults as well as children. The subjects included were Hebrew history and Bible stories.

There is a small group of college students who use the library almost constantly. One of these, a Radcliffe student, has won a three hundred dollar scholarship and says that she has the library and its assistants to thank for it. With a result like that, any amount of work is worth while. I hope there may be many more similar instances.

A test of the value of a branch to its constituents is the use to which it is put. "This one is certainly used to the utmost," remarked a high school teacher, as he watched one evening, with interest, our regular body of reference students, magazine readers and borrowers. The station is certainly used to its capacity, and the scope of its usefulness is enlarging.

The reference work with the evening center has been gratifying this year. The director, Mr. Hawley, had cards printed, giving the schedule of his lecture course, with a line added calling attention to the library. We have had several members register for cards, and the members of the Mother's Club come or send their children for books on the subjects of the popular talks.

Occasional free lectures have been given at some of the branches, where there are convenient lecture rooms adapted to the purpose.

THE STORY HOUR.

The story hour for children has been observed during the year at the Central Library and at the following branches and stations: Brighton, Jamaica Plain, North End, Roxbury, South Boston, South End, West End, Upham's Corner, Parker Hill. At Roxbury stories have been given by the Children's Welfare League, without expense to the library, and at the other places by Mrs. Cronan, employed by us. Of the success of this element of the library work, as conducted here, there is no doubt. It is not carried on for the amusement of the children merely, but it is educational in its effect and leads to acquaintance with books and to their profitable use.

The story hour at the Central Library attracts children from all parts of the city, and many of them would not otherwise become familiar with the central building and its opportunities for young readers. At the branches the audiences are largely from the immediate neighborhood, although it has been found that some children become so much interested in the subjects of



NORTH END BRANCH: STORY HOUR IN THE OPEN AIR READING ROOM.

the stories that they go from branch to branch, in order to become better acquainted with them. It is not uncommon to have a child in attendance at the Central Library remark: "I have heard this story told at one of the small libraries, but I want to hear it again."

During the past year there has been a total attendance of 2,682 at the story hour sessions at the Central Library. Especial effort is made to interest children of from ten to thirteen years of age in the great world epics, folk legends and narratives that are noted in classic literature. It is of importance that the work be carried on consecutively with the groups established at the Central Library and at the branches. Thus the story teller is able to carry the plan toward definite ends and to stimulate a progressive interest in her hearers, leading up from elementary beginnings to final educational results.

Under this arrangement the members of the different groups, at first particularly interested in stories of Indians or other sensational narratives, are easily led to prefer, and to find equally interesting, stories which are interwoven with literature and which naturally attract attention to the books in which they appear, thereby promoting the love and use of books; and incidentally the gap between so-called children's books and books for the general reader is bridged. Abundant proof is given of the hold the stories have upon the children. The custodian of the Children's Department at the Central Library reports that one regular attendant spent the Friday reading hour at school in looking up the story hour characters in the encyclopedia. "They were all there," he said, "I didn't think it was true, but I found them all. Agamemnon and Achilles and Hector were all in the encyclopedia."

The following from the reports of custodians indicate their opinion of the value of the story hour:

I cannot speak too highly of the value of the story hour. When it was introduced our boys were so restless I wondered if they would ever listen. Now with large numbers, usually more than 100 boys, the attention is almost perfect, and the books from which the stories are told are invariably called for.

Children of varying ages listen breathlessly to all the stories told. . . . When the story teller steps into the Children's Room after a story hour she is besieged with requests for names of books to read.

The story hour has continued once a week throughout the year, with an intermission of two months in the summer. The

attendance, very large during the winter, diminished when out-of-door attractions multiplied. We began again in September with a class of 35 the first day, the number steadily increasing to 120 in attendance last week. The boys predominate in number on these occasions, but are usually well-behaved and listen attentively. The class shows the effect of the past year in improved power of concentration.

The story hour opens to them in a most vivid and interesting way much that is best of the literature of the world. In the story hour the gods and heroes of ancient Greece and Rome live again; the imagination of the child is awakened to appreciate and love the beauty of much that would otherwise remain a sealed book to him. A world of romance and poetry is unlocked, and lessons of bravery, generosity and kindness inculcated and unconsciously absorbed. No one seeing the eagerness and attention with which the children listen for every word that falls from the lips of the story teller, watching the sparkling eyes, the changing expressions on their faces as the tale progresses, and the long, deep sigh when it is finished, could doubt the value of this method of making them familiar with the great world of books.

REGISTRATION DEPARTMENT.

The chief of the Registration Department, Mr. John J. Keenan, reports that the number of borrower's cards in force January, 1913, was 96,505, a gain of 3,906 for the year. These cards are classified as follows:

Held by men and boys	42,489
Held by women and girls	54,016
Held by persons over sixteen years of age	54,182
Held by persons under sixteen years of age	42,323
Pupil's cards (public and parochial schools)	34,016
Student's cards (higher institutions of learning)	26,312

This classification shows the following percentages of increase for the year: Men and boys, 1.8 per cent; women and girls, 4.1 per cent; persons over 16 years, 6.9; persons under 16 years, 1.0; pupils (public and parochial schools), 3.1; students (higher institutions), 4.0.

VARIOUS STATISTICS.

Distribution of Documents.

During the year the distribution of library publications has been as follows:

Sent to departments for free distribution	100,799
Sent to departments for sale	857
Free direct distribution	37,741
Distributed for library use	145

These documents include the bulletins and weekly lists, and other special catalogues issued to promote the public convenience in the use of the library and to enable borrowers to acquaint themselves with the titles of current additions to the library.

Publications.

Under the editorial supervision of Mr. Lindsay Swift the following publications have been issued:

1. "Quarterly Bulletin." Four numbers, in editions of 2,000 copies each; total number of pages, 436. The issue for September 30 in each year contains the announcements of the free lectures to be given at the library and by the Lowell Institute, and also the prospectus of the University Extension Courses. The public demand for all the issues is virtually up to the limit of the editions.
2. "Weekly Book List." Fifty-two numbers. Editions, 2,500 copies. Total number of pages, 362. This list appears promptly every Saturday morning and supplies a current finding list, in condensed form, of the weekly accessions.

Besides the foregoing there has been published a useful finding list of books for boys and girls, for which the copy was prepared by Miss Alice M. Jordan of the Children's Department at the Central Library. This is a useful aid in the selection of books for young readers who are unable personally to use the open shelves. An earlier edition was published some years ago, but the present issue has been carefully revised.

The library has cooperated with the School Department in the preparation of a guide to aid pupils in the selection of books in the library, published as School Document No. 5, 1913. This guide was prepared by a committee of teachers appointed by Dr. Franklin B. Dyer, Superintendent of Schools. Of this committee, Mr. A. L. Rafter, assistant superintendent, was chairman, and Miss Jordan, representing the library, was a member.

The Bates Hall Center Desk, Newspaper and Patent Rooms, Central Library.

The following items are reported by Mr. Pierce E. Buckley, custodian:

Center Desk.—The number of readers, always large, as recorded at the center desk, Bates Hall, reached its maximum for the year, 303, on February 5, 1913, at five o'clock.

Newspaper Room.—There are now 323 newspapers regularly filed in this room, as issued. This number includes 243 dailies and 80 weeklies. During the year four papers were added to the subscription list, and 21 dropped or ceased publication. Of the papers now taken 225 are published in America, and 98 are foreign. We bind for preservation all the local papers and a selected list of the more important papers published in other cities. The total number of bound volumes in the newspaper files is 7,643. The number of persons who consulted the files during the year was 12,681, who used 30,232 volumes. This sufficiently illustrates the large use which is made of this important collection. The library is slowly completing, as opportunity occurs, its files of early papers. These contain much valuable historic material. One of the important additions made during the year is the *Philadelphia Evening Post* for 1776, January 2 to December 28, complete. This paper was the first to give to the public the news of the Declaration of Independence. The text is published in full over the name of John Hancock.

Patent Room.—The collection of volumes of patents has been enlarged by 452 volumes during the year and numbers 12,595 volumes. The recorded use of this room is:

	1913-14.	1912-13.
Volumes consulted, as recorded.....	97,945	89,437
Persons using the collection.....	13,430	13,946

It is impossible to give quite accurately the number of volumes consulted and the recorded number is probably below the real total, since readers may freely use the volumes from the open shelves.

The Periodical Room, Central Library.

The following table shows the number of readers in the Periodical Room, Central Library, at certain hours, as totalized in each of two successive years:

HOURS.	10 a. m.	12 m.	2 p. m.	4 p. m.	6 p. m.	8 p. m.	10 p. m.
1913-14.....	9,933	13,972	20,830	26,483	19,861	23,362	8,314
1912-13.....	9,896	13,928	20,714	26,419	17,720	23,334	8,219

These figures indicate an increased use of the room, which is generally well filled with readers. Not only are the current periodicals widely read, but the bound files are in constant and increasing use as will appear from the following comparative statement:

	1913-14.	1912-13.
Bound volumes consulted during the year, in the daytime (week days).....	33,228	32,987
In the evening or on Sundays.....	11,893	11,360

The use by students of the Periodical Room, especially the bound files, is extensive, particularly for the purpose of obtaining data bearing upon subjects of study in the schools and colleges in this vicinity. On a single day, March 20, 474 unbound magazines were used during the day, and on December 23, 541 bound volumes were consulted.

The periodicals currently published and regularly filed in the Periodical Room at the Central Library number 1,150. Besides these the following relating to special subjects are placed on open files in different departments:

Fine Arts Department and Music Room	122
Newspaper Room	99
Teachers' Reference Room	35
Statistical Department	37

Documents and Statistics.

The following additions to the Statistical Department are reported by Mr. Horace L. Wheeler, in charge of the department:

By exchange with and gifts to the American Statistical Association (whose collection is held in this department), 504 volumes and 1,536 pamphlet parts. There have been 449 volumes placed on the shelves from regular library accessions. The total number of volumes in the collection is now 18,337.

The circulation for home use directly from this department for the year is 1,950 volumes; but apart from this recorded circulation probably 10,000 volumes have been used within the reading room. Books are reserved here for the University Extension Courses in economics and the theory of statistics. Regular reservations are also made for student use in connection with the schools of

business administration and the School for Social Workers and much use is made of the department by individual students and by persons investigating problems in economics, social questions and allied subjects. The public documents, state and national, and municipal reports on various subjects of present interest are in constant demand here.

Sunday and Evening Service, Central Library.

The average number of books lent on Sundays and holidays from the Central Library for use outside the building was 744. The largest number lent on any single Sunday (or holiday) was 1,259. The largest number of readers present in the Bates Hall Reading Room on any single Sunday was 295 on February 9, 1913.

The Printing Department.

The following table, compiled from the report of Mr. Francis Watts Lee, chief, presents a comparative statement of the work in the Printing Department in two successive years:

	1912-13.	1913-14.
Requisitions on hand at opening of year.....	11	7
Requisitions received during the year.....	187	172
Requisitions on hand at end of year.....	7	.....
Requisitions filled during the year.....	191	179
Card Catalogue (Central):		
Titles (Printing Department count).....	11,022	17,844
Cards finished (excluding extras).....	109,709	164,335
Titles in type but not printed.....	438	5,220
Card Catalogue (branches):		
Titles (Printing Department count).....	336	296
Cards (approximately).....	18,480	16,280
Pamphlets not elsewhere enumerated.....	8,150	29,876
Call slips.....	2,137,700	186,500
Stationery and blank forms.....	1,003,742	937,735
Signs.....	609	645
Blank books.....	16	94

This report does not cover the publications issued during the year, reported by the library editor, nor does

it include a large amount of work done during the year upon publications in progress, but incapable of satisfactory statistical statement. These two items cover a large portion of the work of the department.

The Bindery.

Mr. James W. Kenney, chief of the bindery, presents figures upon which the following table is based:

	1912-13.	1913-14.
Number of volumes bound, various styles.....	42,499	38,530
Volumes repaired.....	2,644	2,833
Volumes guarded.....	1,637	2,284
Maps mounted.....	805	311
Photographs and engravings mounted.....	5,611	6,694
Magazines stitched.....	216	217
Library publications, folded, stitched and trimmed.....	154,451	183,423

A large amount of miscellaneous work has been done in the bindery, as usual. The delivery of certain bound volumes (in all about 1,500 branch books and about 1,000 volumes awaiting lettering only) has been retarded, and if completed at the time of closing the foregoing account would have brought the total number bound during the year to 40,780.

The other principal items of work performed during the year, as shown by the table, have increased, as compared with the year preceding.

A vacancy in the position of finisher has existed since the death of Mr. Collins, an expert employee of long service. It was thought best, in order to make certain improvements in machinery without enlarging the total expense of the department, to defer, temporarily, the filling of this vacancy. It seems, however, that if the bindery is to be kept up to the level of present requirements, as fixed by the demand for rebinding over the entire library system, the force cannot be permanently reduced. We are endeavoring to extend to the highest point the use of our books. It is for this purpose that the library exists. The larger the use, the larger will be the demand for rebinding. The number of volumes bound is not an exact measure of the work performed, since the character of the volumes differs, and there

may be a larger number of cheap books of the popular type carried through in some years than in others. On the whole we do not defer rebinding quite as long as formerly; and for sanitary reasons it would be well not to defer it as long as, for reasons of economy, we even now find necessary. Books in constant use, especially books used by children, rapidly become defaced, soiled and generally unattractive, and these defects can only be overcome by rebinding.

In the summer of 1909 the number of employees was enlarged to provide for rebinding an accumulation of about 10,000 volumes, the number requiring rebinding each year for several previous years having outrun the capacity of the bindery. The virtual completion of this special work, however, does not permit the dropping of the employees then taken on, unless the output is again to be allowed to fall behind, since the amount of current rebinding required is increasing and books upon the shelves are in constant need of repair to keep them in order. For example, a rearrangement of the location of certain volumes in the stacks, necessary for the purpose of conserving space, involving careful inspection of the books transferred, has disclosed many which require rebinding.

The total expense of the bindery in each year beginning with 1911 is shown here:

YEARS.	Total Expense.	Total Wage Expense.
1911.....	\$36,367 65	\$29,847 17
1912.....	37,539 92	29,517 39
1913.....	36,289 67	29,296 04

A comparison of this kind based upon years preceding 1911 cannot be made fairly, owing to differences in conditions which would vitiate any conclusions which might be drawn.

This table shows no material increase in expense (measured in dollars expended, without any reference to actual cost of production based on output). In 1911 there was an increase in the wage expense on account of an advance in trade union rates, to which the library has conformed. Two employees less than in 1911 enter into the wage expense in 1913. Rent has increased

from \$929 in 1911 to \$1,350 at present paid. Disregarding the varying elements of cost of rent and expense for equipment, and allowing for the considerable amount of miscellaneous work, which is estimated to cost at least 17 per cent of the entire cost of maintenance, it seems that the average cost per volume bound has not increased since 1910, although working time has decreased and wages increased under trade union rules.

A comparison of expense, accurately made, would, of course, rest on cost of production per unit of product of every kind rather than upon comparison of money expense merely. The cost of stock has increased following the general advance in prices. Only a complete and careful audit, taking into exact account all of the items produced and work done in each year, would show whether or not the actual expense of the bindery has diminished or increased, or whether the work could be done under contract at less expense, disregarding convenience. On the score of quality of work, as well as of convenience, including the possibility of getting what is required promptly, especially the articles included in the large quantity of miscellaneous work, there are obvious advantages in having our own bindery immediately at hand.

The expense of binding, however performed, will always be large in a large library. As at present operated the cost of the bindery constitutes about 9.1 per cent of the total expense of the library. If the cost of the Printing Department be added to this, the percentage of the total cost of the library maintenance and operation is raised to nearly twelve. The cost of the Printing Department annually since 1911 is as follows:

YEARS.	Total Expense.	Total Wage Expense.
1911.....	\$12,760 56	\$7,118 22
1912.....	12,271 86	6,493 32
1913.....	11,342 69	7,208 42

The wage account in 1912 was reduced by reason of the removal of the plant in that year, causing partial suspension of work, the saving in wages being offset,

however, by other expenses connected with the removal and refitting, leaving the total cost of the department for the year about as usual.

There has been little change in the expense of the Printing Department within the period covered by the comparison. This department is, of course, not affected by the wear and tear, due to circulation, as is the bindery, with proportionate increase in cost. Its output is comparatively even. It is not easy to measure its cost of production by any standard of measurement common to ordinary printing establishments. The kind of printing which the library requires demands special equipment and trained efficiency in producing results conforming to the conventional library forms and methods. Printing establishments operated for general book or commercial printing do not have this special equipment. The training of the employees results from exclusive attention to the kind of work the library requires, and consequent familiarity with the standard forms used in cataloguing, whereby they become specialists.

What has been said of the convenience of having the work of binding done in our own department applies also to our printing. Both departments are well arranged for effective operation in their present quarters, both are well directed, and the employees in both are efficient. The physical condition of the plant is excellent, with the exception of a slight improvement that might be made in the bindery, without great expense, by the substitution, in a few instances, of more modern machines for those now in use.

EXAMINATIONS.

Examinations for library service were given as follows: Grade E, March 15, 74 applicants, of whom 49 passed; Grade B, September 5, 8 applicants, of whom 5 passed; Grade C, September 5, 48 applicants, of whom 21 passed; and Grade E, September 6, 58 applicants, of whom 23 passed.

CHIEFS OF DEPARTMENTS AND CUSTODIANS OF BRANCHES AND READING-ROOM STATIONS.

As at present organized, the various departments of the library and the branches and reading-room stations are in charge of the following persons:

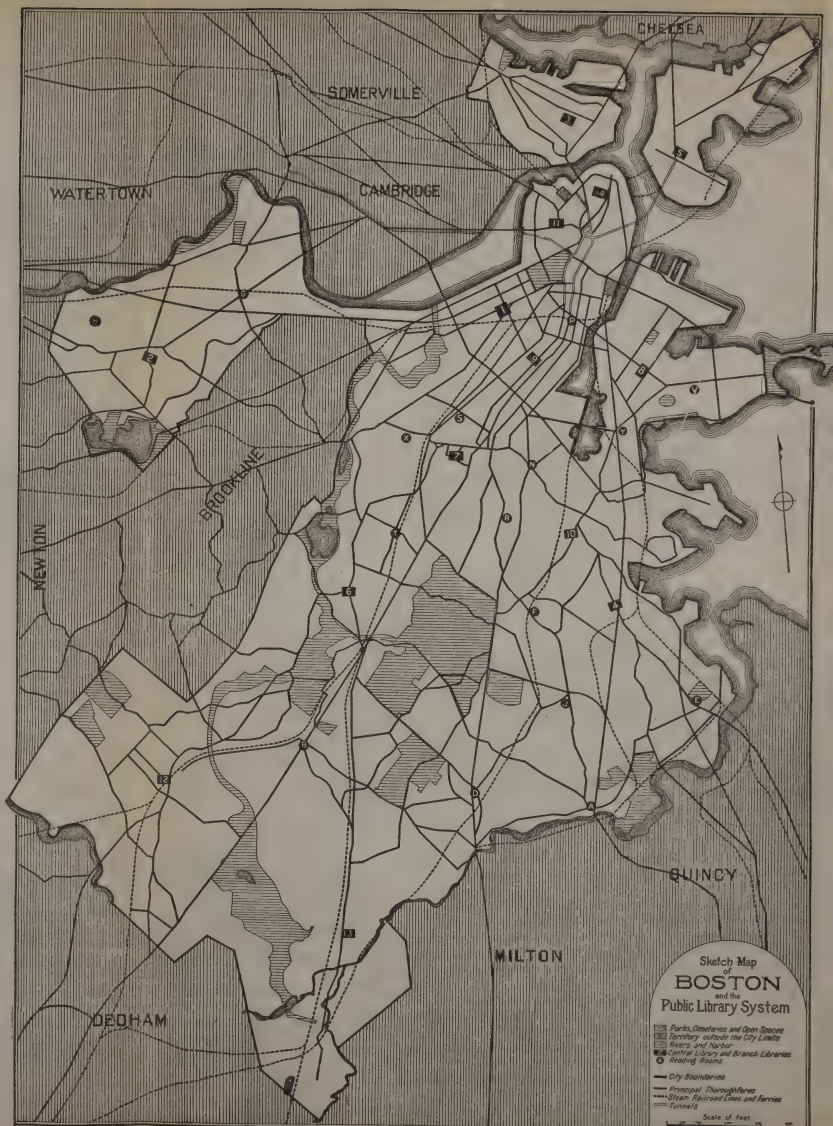
1. Central Library, Copley Square.

BRANCH LIBRARIES, FEBRUARY 1, 1914.

2. Brighton Branch, Holton Library Building, Academy Hill Road.
3. Charlestown Branch, Monument Square, cor. Monument Ave.
4. Dorchester Branch, Arcadia, cor. Adams St.
5. East Boston Branch, Austin School Bldg., Paris St.
6. Jamaica Plain Branch, Sedgwick, cor. South St.
7. Roxbury Branch, 46 Millmont St.
8. South Boston Branch, 372 Broadway.
9. South End Branch, 397 Shawmut Ave.
10. Upham's Corner Branch, Columbia Road, cor. Bird St.
11. West End Branch, Cambridge, cor. Lynde St.
12. West Roxbury Branch, Centre, near Mt. Vernon St.
13. Hyde Park Branch, Harvard Ave., cor. Winthrop St.
14. North End Branch, 3a North Bennet St.

DELIVERY STATIONS, FEBRUARY 1, 1914.

- A. Lower Mills Reading Room, Washington, cor. Richmond St.
- B. Roslindale Reading Room, Washington, cor. Ashland St.
- D. Mattapan Reading Room, 727 Walk Hill St.
- E. Neponset Reading Room, 362 Neponset Ave.
- F. Mount Bowdoin Reading Room, Washington, cor. Eldon St.
- G. Allston Reading Room, 6 Harvard Ave.
- H. Faneuil Reading Room, 100 Brooks St.
- J. Codman Square Reading Room, Washington, cor. Norfolk St., Dorchester.
- N. Mt. Pleasant Reading Room, Dudley, cor. Magazine St.
- P. Broadway Extension Reading Room, 13 Broadway Extension.
- R. Warren Street Reading Room, 390 Warren St.
- S. Roxbury Crossing Reading Room, 1154 Tremont St.
- T. Boylston Station Reading Room, The Lamartine, Depot Square.
- V. City Point Reading Room, Broadway, near H St.
- X. Parker Hill Reading Room, 1518 Tremont St.
- Y. Andrew Square Reading Room, 396 Dorchester St.
- Z. Orient Heights Reading Room, 1930 Bennington St.



Central Library, Copying Square

BRANCH LIBRARIES, FEBRUARY 1, 1914

- 1. Brighton Branch, 1000 North Street, Brighton 1111
- 2. Cambridge Branch, 1000 North Street, Cambridge 1111
- 3. Cambridge Branch, 1000 North Street, Cambridge 1111
- 4. Cambridge Branch, 1000 North Street, Cambridge 1111
- 5. Cambridge Branch, 1000 North Street, Cambridge 1111
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DELIVERY STATIONS, FEBRUARY 1, 1914

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Samuel A. Chevalier, Chief of Catalogue Department.
William G. T. Roffe, in charge of Shelf Department.
Theodosia E. Macurdy, Chief of Ordering Department.
Oscar A. Bierstadt, Custodian of Bates Hall Reference Department.
Pierce E. Buckley, Custodian of Bates Hall Center Desk, Patent and Newspaper Departments.
Frank H. Chase, Custodian of Special Libraries.
Barbara Duncan, Custodian of Brown Music Library.
Walter G. Forsyth, Custodian of Barton-Ticknor Room.
Frank C. Blaisdell, Chief of Issue Department.
Langdon L. Ward, Supervisor of Branches and Stations.
Alice M. Jordan, Chief of Children's Department.
John J. Keenan, Chief of Registration Department.
Horace L. Wheeler, First Assistant, in charge of Statistical Department.
Francis Watts Lee, Chief of Printing Department.
James W. Kenney, Chief of Bindery Department.
Henry Niederauer, Chief of Engineer and Janitor Department.
Marian W. Brackett, Custodian of Brighton Branch.
Katherine S. Rogan, Custodian of Charlestown Branch.
Elizabeth T. Reed, Custodian of Dorchester Branch.
Ellen O. Walkley, Custodian of East Boston Branch.
Elizabeth Ainsworth, Custodian of Hyde Park Branch.
Mary P. Swain, Custodian of Jamaica Plain Branch.
Edith Guerrier, Custodian of North End Branch.
Helen M. Bell, Custodian of Roxbury Branch.
Mary J. Minton, Custodian of South Boston Branch.
Margaret A. Sheridan, Custodian of South End Branch.
Josephine E. Kenney, Custodian of Upham's Corner Branch.
Alice M. Robinson, Custodian of West End Branch.
Carrie L. Morse, Custodian of West Roxbury Branch.
Mary A. Hill, Custodian of Station A, Lower Mills Reading Room.
Grace L. Murray, Custodian of Station B, Roslindale Reading Room.
Emma D. Capewell, Custodian of Station D, Mattapan Reading Room.
Mary M. Sullivan, Custodian of Station E, Neponset Reading Room.
Isabel F. Wetherald, Custodian of Station F, Mt. Bowdoin Reading Room.
Katherine F. Muldoon, Custodian of Station G, Allston Reading Room.

Gertrude M. Harkins, Custodian of Station J, Codman Square Reading Room.

Margaret H. Reid, Custodian of Station N, Mt. Pleasant Reading Room.

Cora L. Stewart, Custodian of Station P, Broadway Extension Reading Room.

Florence M. Bethune, Custodian of Station R, Warren Street Reading Room.

Katrina M. Sather, Custodian of Station S, Roxbury Crossing Reading Room.

Elizabeth P. Ross, Custodian of Station T, Boylston Station Reading Room.

Edith F. Pendleton, Custodian of Station Z, Orient Heights Reading Room.

Alice L. Murphy, Custodian of Station 23, City Point Reading Room.

Mary F. Kelley, Custodian of Station 24, Parker Hill Reading Room.

I wish to acknowledge the loyal support of these chiefs of departments and custodians of branches and stations, and that of the members of the staff generally.

I also place on record here my appreciation of the faithful and efficient services of Mr. Otto Fleischner, Assistant Librarian.

Respectfully submitted,

HORACE G. WADLIN,
Librarian.



ANNUAL REPORT
OF THE
MARKET DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1914.

CITY OF BOSTON,
OFFICE OF SUPERINTENDENT OF MARKETS, March 12, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

DEAR SIR,— In conformity with section 24 of the Revised Ordinances, I herewith submit the annual report of the Department of Markets for the year ending January 31, 1914.

The work of the department has been of a routine nature.

The rentals have been promptly paid and the regulations of the Market Department have been strictly enforced. The lessees and the department have worked in harmony with the Health Department in carrying out such regulations as have been adopted for the protection of the public in food which is offered for sale. Such food as has been offered for sale within the market limits has been of excellent quality, so much so that the few complaints which have been made have been satis-

factorily adjusted and we have been called upon to condemn very small quantities of such supplies as were unfit to be used for human food.

During the year several necessary repairs have been made by the Department of Public Buildings, among which has been the repair of the roof on the north side of the Faneuil Hall Market building which, because of its leaky condition, has been a great annoyance, causing damage to merchandise and considerable expense to the lessees. Where it has become necessary to renew the floors in the stalls and basement, asphalt or a sanitary material has been used which has given good satisfaction and in the end will be less expensive than to have replaced them with wooden floors. The floors in the main passageways of New Faneuil Hall Market should be renewed as they are badly worn and liable to become dangerous to persons passing through. The brick sidewalks around the Faneuil Hall building should be relaid or, what would be better, replaced with granolithic. In addition to the repairs made by the city the lessees have made many repairs and improvements at their own expense, and the market houses were never in better repair or more attractive in appearance than at the present time. Only ordinary repairs will be necessary during the coming year.

In August, 1913, with the approval of the then Mayor, Hon. John F. Fitzgerald, arrangements were made with the Ames Plow Company whereby the Boston Fruit and Produce Exchange took possession of the entire section of the premises leased by the Ames Plow Company extending toward Commercial street, and have fitted up that section in keeping with the portion occupied by them at an expense of more than \$5,000 to the Exchange.

The women's toilet established in 1912 has been very highly commended by the women of the Municipal League as well as representatives of other women's organizations, who are advocating that places of the same kind should be established in other parts of the city where women are employed.

During the year the department has condemned and caused to be destroyed as unfit to be used for food three hundred ninety-four (394) pounds of poultry, forty-nine (49) pounds of lamb, nineteen hundred forty (1,940) boxes of berries, one hundred fifty (150) boxes of cauliflower, seventy (70) baskets of peaches, small quantities

of fish, besides a considerable quantity of fruit and vegetables sent to the dumping scow.

The police detailed for duty at Faneuil Hall Markets have made thirty-one (31) arrests for the following offences:

Larceny	10
Assault and battery	10
Assault and robbery	3
Drunkenness	7
Forgery	1
	31

besides appearing as witnesses in several cases of cruelty which they had reported to the Society for the Prevention of Cruelty to Animals.

The income from the Department of Markets for the year ending January 31, 1914, has been as follows:

From rents of stalls and cellars in Faneuil Hall Market	\$96,120 00
From rents of stalls and cellars in New Faneuil Hall Market	25,200 00
From rents of outside stands at Faneuil Hall Market	1,356 00
From weighing fees at city scales	147 72
	\$122,823 72

The appropriation for the Department of Markets for the year ending January 31, 1914, was \$13,500 00

And has been expended as follows:

Salary of Superintendent of Markets, ...	\$3,000 00	
Salary of Deputy Superintendent of Markets	1,700 00	
Salary of weigher at city scales	1,321 29	
Salary of watchmen	2,103 93	
Salary of messenger	1,000 00	
Salary of janitors, including matron at women's toilet	2,413 96	11,539.18 ✓
Furnishings and cleaning	365 98	
Repairs	535 41	
Printing	65 78	
Stationery	22 02	
<i>Carried forward</i>	\$12,528 37	\$13,500 00

<i>Brought forward</i>	\$12,528 37	\$13,500 00
Postage	6 00	
Telephone	109 29	
Fuel	18 75	
Gas	152 42	
Electric light	422 05	
Police	40 00	
Typewriting	18 05	
		13,294 93
Balance unexpended		<u>\$205 07</u>

Property in the department belonging to the City of Boston is as follows:

Electric wiring and fittings in Faneuil Hall and New Faneuil Hall Markets	\$1,672 00
One Howard Watch Company clock	200 00
One Howard Watch Company clock	50 00
One Morse safe	150 00
Two roll-top desks and one roll-top case	125 00
Two clothes presses	30 00
Scales, weights, etc.	125 00
Bookcase, carpets, chairs and small supplies	100 00
	<u>\$2,452 00</u>

Respectfully submitted,

GEORGE E. MCKAY,
Superintendent of Markets.



ANNUAL REPORT
OF THE
OVERSEERS OF THE POOR DEPARTMENT
FOR THE YEAR 1913-14.

BOSTON, February 17, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— The Board of Overseers of the Poor herewith presents its fiftieth annual report of the present series, covering the year from February 1, 1913, to January 31, 1914.

EXPENSES OF THE DEPARTMENT.

Our drafts upon the city treasury during the year ending January 31, 1914, amount to	\$235,847 43
Sundry receipts paid over to City Collector	26,597 43
Leaving the net charge to the city for the department for the year	<u>\$209,250 00</u>
Amount collected by us for care in City Hospital of state paupers and those belonging elsewhere than in Boston	<u>\$47,762 30</u>
Amount paid over to the trustees of the City Hospital in the year	<u>\$47,762 30</u>

STATISTICS OF CASES AIDED.

The number of families assisted by us in the year was 2,978, an increase of 339 families from the previous year.

Of these, 228 families resided in other cities and towns but had retained their settlement in this city, and we received payment for aid rendered to 273 families residing in Boston whose legal settlement was elsewhere.

The number of new cases aided during the year was 1,193. The total number of cases dealt with since 1864 is 43,520.

The number of official visits made by our visitors during the year was 29,464, of which 20,222 were made in the homes of the poor and 9,242 for information.

FAMILIES AIDED DURING THE YEAR ENDING JANUARY 31, 1914.

1,844 having settlements here, aided directly from this office.

228 having settlements here, aided in other cities and towns through the overseers of the poor of those places.

232 families, of which the man is unsettled, the wife and children having a settlement here.

273 residing here, having settlements in other cities and towns, which refund amount of relief granted.

331 unsettled cases aided on account of the state.

70 nonsettlement cases, temporarily aided.

2,978 families, representing about 8,934 persons.

Of this number 531 are aided under chapter 763, Acts of 1913.

NUMBER OF FAMILIES AIDED IN EACH MONTH OF THE PAST TWO YEARS.

1912.	Feb.,	1,447 families.	1913.	Feb.,	1,444 families.
	March,	1,393 "		March,	1,404 "
	April,	1,276 "		April,	1,283 "
	May,	1,215 "		May,	1,266 "
	June,	1,198 "		June,	1,227 "
	July,	1,170 "		July,	1,247 "
	Aug.,	1,165 "		Aug.,	1,244 "
	Sept.,	1,136 "		Sept.,	1,294 "
	Oct.,	1,223 "		Oct.,	1,401 "
	Nov.,	1,252 "		Nov.,	1,384 "
	Dec.,	1,398 "		Dec.,	1,698 "
1913.	Jan.,	1,496 "	1914.	Jan.,	1,798 "

The sum of \$165,164.70 has been given directly to the poor, to which should be added the sum of \$2,785.30

paid for burials, \$5,602.22 paid for support of the Temporary Home, and \$13,130.38 paid for support of the Lodge for Wayfarers, making a total of \$186,682.60 actually paid out by the Overseers of the Poor from the tax levy for the direct relief of the poor. We have also disbursed as trustees the further sum of \$34,376.68 to the various pensioners and beneficiaries adjudged worthy and falling within the provisions of the trusts.

CERTAIN EXPENSES OF THE DEPARTMENT DURING THE PAST YEAR.

Net cost of the department	\$209,250 00
Aid given directly to the poor	\$165,164 70
Less amount paid to other cities and towns	13,513 35
Leaving amount actually given to poor in Boston	<u>\$151,650 35</u>
Number of families aided	2,978
Number of persons aided	8,934
Population of Boston, probably	731,440

INCREASED ACTIVITIES AND EXPENSES.

Examination of the statistics of our work and of our expense account will show that both have made a considerable increase over the preceding year; a total number of 2,978 families were cared for during the year as against 2,639 in 1912, an increase of 339 families. The amount of relief actually given to the poor increased \$56,967.51 over 1912.

WAYFARERS' LODGE.

Early in the year we added to our permanent staff at the lodge an examining and consulting physician. Dr. Thomas J. Lawler began work in April and is in attendance every night for from three to four hours. His work consists in examining the lodgers to see if they have any contagious or other disease, in prescribing for such as are ill or have bodily wounds or injuries, and in arranging for the further care in hospitals of such as need continued medical attendance or treatment. Tuberculosis or other contagious cases are promptly isolated for the night in our own hospital dormitory. In the morning such cases are sent to the State Hospital at Tewksbury, or other hospital care is obtained. Doctor Lawler finds the average health of our

lodgers remarkably good. For the most part they are young men and comparatively free from communicable or other diseases.

As will be seen by the statistics, our population has increased during the year. In January of 1914 our accommodations for lodgers were several times overtaxed. We were able, however, to receive nearly all applicants by throwing open the dining room and other rooms and having some of the men sleep on the floor and benches. This lasted but a few nights and was apparently due to the intense cold weather.

NEED OF A NEW WAYFARERS' LODGE.

We have in former reports spoken of the great need of a modern and more commodious building. We are housed in an abandoned schoolhouse which was considered antiquated thirty years ago and has had hard usage ever since. We have tried to adapt it to our purposes as best we could and have spent a good deal of money in so doing. But it has always been unsatisfactory and it is every year becoming more difficult for us to adequately deal with the problem of caring for the men who apply to us for lodging. Boston ought not to be behind other cities in this respect. We ought not to have to apologize to visitors from other cities and to the world because of our old-fashioned, worn-out building. There is no reason why we should not have a proper building in a suitable location on a lot large enough to provide storage for the wood and with ample room in which to work the men. At present the yard room is wholly inadequate for our purposes. Men have to be worked in shifts and so close together as to make the work difficult to perform.

An appropriation of \$3,000 was made in January, 1914, for the purpose of employing an architect to make plans for a new Wayfarers' Lodge and the Board selected Mr. Julius A. Schweinfurth as the architect, who has prepared some preliminary plans. These are now under consideration and it is hoped that we may secure from the present city government an appropriation sufficiently large to purchase a lot and erect a new building. Boston was among the first cities of the country to establish a municipal lodging house to care for wayfarers and probably the very first to apply the work test to the

lodgers. This lodge has been in successful operation for thirty-five years. It is certainly time that it should be given a suitable home so that it may continue to carry on its good work under better auspices. We need a new fumigating plant; we need more room and much better sanitary arrangements. A great, rich city like Boston cannot afford to neglect the welfare of its guests even though they be transient and unwelcome. It should properly house and feed them without being obliged to blush for the poor accommodations which it offers them.

Number of Lodgers by Months.

	Individual Lodgers.	Total Lodgers.
1913.		
February.....	1,245	2,454
March.....	1,399	3,209
April.....	1,272	2,934
May.....	972	2,228
June.....	668	1,506
July.....	442	1,055
August.....	561	1,200
September.....	738	1,509
October.....	864	2,009
November.....	1,107	2,791
December.....	1,364	4,489
1914.		
January.....	1,222	4,821
Totals.....	11,854	30,205

Average number of lodgings per man, 1913-14	2.55
Average number of lodgings per man, 1912-13	2.48
Total number of meals from February 1, 1913, to January 31, 1914, ...	52,959
Total number of meals from February 1, 1912, to January 31, 1913, ...	48,479
Increase in number of meals given	4,480
Increase in total number of lodgers as compared with previous year	3,165

Place of Birth of Lodgers.

	Number.	Per Cent.
United States.....	6,770	57.11
Ireland.....	2,417	20.39
England.....	479	4.04
British Provinces.....	890	7.51
Scotland.....	264	2.23
Sweden and Norway.....	285	2.40
Other countries.....	749	6.32
Total.....	11,854	

THE WORK TEST.

	1910.	1911.	1912.	1913.
Number of men who worked for aid given	110	121	138	167
Number of days' work actually performed	972	1,035	1,102½	1,297
Number of men receiving work cards who did not present them for work,	17	48	63	53

REPORT OF THE CITY TEMPORARY HOME.

The City Temporary Home is in better condition than it has been for many years. New metallic ceilings in the halls throughout the entire building have replaced the old plaster ceilings. A new electric system, adequate fire alarm and fire escapes, also new hardwood floors in kitchen and pantries, these much needed repairs, together with painting and whitening, go to make the home safe and comfortable. The staff of matrons continues the same. Hundreds of women and children have found shelter, food and protection during the past year. In every case it is the ones that are in need of temporary protection and care that have applied and have been received.

During the past year the home has received and cared for — for periods from one day to one month — many mothers and their little ones. It has also sheltered families who were evicted for nonpayment of rent;

families who were passing through the city to some far distant place, coming to a new land to make a new home; others who were returning to some other city, state or country. These families were sent by city or state boards, or by private societies.

The runaway girl or boy, the lost or abandoned child, even those who escape from the insane hospitals, are cared for in the home until proper authorities take them in charge.

Good wholesome food, properly prepared, is always served; good clean beds are provided, and kind and humane treatment given by those who are in charge.

The poor unfortunate girl finds refuge, also good advice; here she is taught how to care for herself and child, and protected for at least a few weeks after leaving some hospital.

The matron in the course of the year finds employment for many of the women and young girls who seek the home. At Easter, Thanksgiving and Christmas special dinners are provided for those who come to the home.

In a word, the City Temporary Home holds a valuable place in our city, doing, in a most quiet manner, a noble work.

Every one physically able is expected to attend either the Roman Catholic or Protestant church on Sunday.

DONATIONS.

Candy . . .	Mr. Thomas Sproules.
\$1, cash . . .	Mrs. Tillie Barrett, Antrim, N. H.
Toys . . .	C. F. Hovey & Co., Boston, Mass.
Toys . . .	Faith and Hope Association, Hubbardston, Mass.
Clothing . . .	Mrs. Joseph Bigelow, 251 Commonwealth avenue.
Clothing . . .	Mrs. M. E. Lawlor, 101 St. James avenue.
Magazines . . .	Mrs. Perrego, 45 Charles street.
Magazines . . .	Mrs. Charles Folsom, 114 Marlborough street.
Magazines . . .	Miss Bailey, 96 Elm street.

All confinement cases are sent to the Boston Lying-in Hospital, and a stipulated sum paid for their care.

Total cost of confinement cases	\$580 00
Charged to state for unsettled cases	\$325 00
Charged to other cities and towns	70 00
Received from individuals	55 00
	450 00
Leaving net cost to the city for confinement cases	<u>\$130 00</u>

Statistics of the Temporary Home.

	Individual Women Admitted.	Individual Children Admitted.	LODGERS.	
			Women.	Children.
1913.				
February.....	73	57	322	136
March.....	62	36	306	129
April.....	77	68	327	236
May.....	81	59	343	208
June.....	82	57	290	155
July.....	78	49	288	214
August.....	66	41	332	126
September.....	54	37	238	137
October.....	75	32	253	88
November.....	100	34	384	85
December.....	89	50	395	101
1914.				
January.....	86	40	410	157
Totals.....	923	560	3,888	1,772

Average number of lodgings per individual, 1913-14, 3.82.

Total number of women admitted	641
Number of women admitted once only	457
Number of women admitted more than once	184
	641
Number of old cases of women admitted	343
Number of new cases of women admitted	298
	641
Number of women known to have been in almshouse only	131
Number of women known to have been in prison only	60
Number of women known to have been in almshouse and prison	75
Number of women not known to have been either in almshouse or prison	375
	641
Number of women admitted between 7.45 p. m. and 6.45 a. m.	284
Number of children admitted between 7.45 p. m. and 6.45 a. m.	147
Number of places secured at domestic service	131
Number of places secured for mothers with children	6
Total number of meals served	18,752
Number of meals served to persons not living in home	4,356

Record of Children Admitted to the Home.

Number of children admitted	525
Number of children admitted once only	483
Number of children admitted more than once	42
	525
Number of children who came with mothers	205
Number of children who were brought by societies	57
Carried forward	262

<i>Brought forward</i>	262	
Number of children who were brought by state agents	90	
Number of children who were brought by city agents	30	
Number of foundlings	19	
Number of runaways	50	
Number of lost children	23	
Number of children who came in other ways	51	
	—	525
Number of children cared for less than one day		45

CITY HOSPITAL.

We still continue to incur a large expense for collecting for two other city departments. The trustees of the City Hospital and the Board of Health benefit very largely each year by the work done for them by us in the matter of determining settlements of sick people aided at the City Hospital. The amount collected by us, or by means of our investigations, during the past year was \$75,803.36. The settlements of people suffering from contagious diseases are looked up by us for the Board of Health and we send the bills to the City Collector for collection. In the case of the ordinary sick people admitted to the City Hospital, but not having a settlement in Boston, we not only look up the settlements but personally collect the sums due the City Hospital for care of such cases.

In addition to the yearly expense of our staff of clerks at the hospital engaged in this work, which was this year \$4,744.17, we are at the expense for a portion of the year of the salaries of two clerks at the main office. A good deal of the time of the secretary and his assistants is also devoted to this same purpose.

The amount collected by us from the Commonwealth and cities and towns outside of Boston and turned over to the City Hospital during the past year was \$47,762.30.

The sum of \$28,041.06 was also received at the City Collector's office on account of contagious cases cared for at the City Hospital, on bills furnished by our department. If we add to these amounts \$26,314.52 collected at our main office for the relief by us of paupers settled otherwise than in Boston, and paid over directly to the City Collector, we have an aggregate of \$102,117.88 collected by this department.

REPORT OF HOSPITAL WORK, FISCAL YEAR ENDING
JANUARY 31, 1914.

Number of admissions, main hospital	10,621
Number of cases on which the state was notified	4,271

Number of cases prepared for notice to towns	1,204
Number of letters written for further information	5,472
Number of histories taken	10,377
Number of visits made	375

Health Department.

Admissions to the South Department	2,361
Number of cases on which the state was notified	492
Number of cases prepared for notice to towns	242

Amount of money received at the main hospital from the Overseers of the Poor	\$47,762 30
Amount of money received at the City Collector's office on account of Health Department cases	28,041 06
	\$75,803 36

MOTHERS' AID.

The Legislature of 1913 passed what is known as the Mothers' Aid Law, which went into effect on September 1, 1913, so that at the date of this report it has been in effect six months. It was a new departure for the Commonwealth, although similar laws have been in force for a few years in other states of the Union.

At the outset it was felt that a great additional burden had been put upon the taxpaying citizens of the state and the results thus far bear out this feeling. The Board soon realized that its appropriation for the current year would prove altogether inadequate to meet the increased expense of administering this law and of meeting the payments required under it. Recourse was therefore had to the Mayor and Council and additional funds were provided by vote of the Council. Our total cash extra disbursements to mothers, most of whom are widows, under this law to February, 1914, the end of our fiscal year, have been \$43,667. This amount does not include the sums paid for groceries, although in a large number of cases both cash and groceries are given as a part of the mothers' aid.

We have found it necessary to greatly increase our working force on account of this law. We have now twelve visitors whose duties are to make personal visits to all the poor families in our care and report upon their needs and qualifications. Their work is most valuable and we feel that money spent for their salaries is wisely spent. They report to the secretary and to the committees of the Board at regular intervals, giving their whole time to the work. In most cases they have offices in their respective districts at which they can be found at regular hours.

DIFFERENCES WITH THE STATE BOARD OF CHARITY.

Chapter 763 of the Acts of 1913, the so-called Mothers' Aid Law, provides a certain supervision by the State Board of Charity over the various Boards of the Overseers of the Poor throughout the Commonwealth. Soon after the law went into effect differences of opinion arose between the officials of the State Board and the Overseers of the Poor. Various conferences were held and endeavors made to accommodate these differences but with scant success. Contrary to the opinion of the Overseers of the Poor, upheld by the legal opinion of several city solicitors, the State Board insists upon construing the law so that it will prohibit giving aid under it to families where the need may not exist for a full year after the case is taken up by the authorities. Reimbursement of aid so given to the extent of one-third in town settled cases and the whole in state cases is refused absolutely by the State Board. This refusal is adhered to after several conferences with the Overseers of the Poor and after the admission by members of the State Board that the law itself contains no limitation of this nature.

Considerable friction was also caused by the fact that the visitation of the cases aided under this law was committed by the State Board to a group of comparatively inexperienced young women, appointed without civil service examination. These young women were very positive in their statements of the conditions and needs of the families visited and were upheld as a rule by the State Board, even when opposed by the judgment of experienced overseers of the poor. It is unfortunate in many ways that there should be the necessity of accounting between different boards with somewhat diverse interests, and it seems especially unfortunate that proper consideration should not be given to the opinions of experienced men of mature years. This is particularly true when such opinions are based, as frequently and almost inevitably happens, upon a long acquaintance with the family.

DEATH OF J. D. REED.

Mr. John D. Reed, who served the Board in the capacity of storekeeper for thirty-five and one-half years,

died in December after a long illness. He was placed on the pension list as a Civil War veteran in 1912, receiving half pay under the statute. He was a faithful, industrious man, who did good work for the department for many years.

DEATH OF WILLIAM I. CALHOUN.

In November, 1913, Mr. William I. Calhoun died at his home in East Boston. He had been a member of the Board only two years but had shown great interest in our work, and we feel that the Board and the city has suffered a distinct loss by his early death.



ADDITIONAL FACILITIES FOR OUR WORK.

The Mothers' Aid Law has made it necessary for us to employ a number of additional clerks and visitors and the increase has so cramped our office that it has forced us to provide additional office room. We have transferred the settlement work to another room, making it a special department under charge of Mr. Hardy, who has a force of four clerks under him. Two of these clerks spend most of their time at the City Hall looking up tax records in order to determine the settlements of persons aided. The City Hospital and tuberculosis cases contribute the greater part of these cases.

REDISTRICTING.

In order better to care for the large increase of cases coming this year it has been found necessary to redistrict the city, creating one new district and changing the lines of most of the old districts. Our Hyde Park visitor was made a full-time visitor and parts of Dorchester and West Roxbury were added to his former district.

We have also placed one of the visitors in charge of the visiting department at our main office. He has an auxiliary visitor and a lady clerk with him, and this new arrangement promises to be a great success.

TRUST FUNDS.

There are in our hands seventeen trust funds, which are administered according to the wishes of the various donors, as interpreted from time to time by the Board with the advice of the Law Department. Applicants

for trust pensions must prove a legal residence in Boston, must be at least fifty years of age and have resided in Boston many years.

The total amount of the trust funds in our charge as a corporation has increased \$2,842.28 during the year, and is now \$858,603.81.

The number of beneficiaries now aided from the Pemberton, the Boylston Relief, the David Sears Charity, the Moses Hunt, the Thayer, the Rachel T. Stevens, the Stoughton, Goodnow, Jeffries and Holton Funds is 269, an increase of 8 from the number aided on February 1, 1913. During the year 25 have died, 3 have gone to an insane asylum, 2 have withdrawn, in seven cases we have stopped the pensions previously given, 1 has gone to the almshouse and 2 left the state. Forty-eight new names have been added.

During the year we have paid \$6,289.66 from the income of the Boylston Education Fund, and there are now thirty-two children on this fund.

At the end of this report will be found a statement of all the funds held by us in trust, showing receipts and expenditures since February 1, 1913, also extracts from the wills under which these trusts were established.

FINANCIAL STATISTICS.

The receipts and expenditures during the last twelve months are shown in detail by reports of the secretary and treasurer which follow.

As usual we have had an expert accountant audit our books and accounts and his certificate is appended hereto. A schedule of the personal property in our hands February 1, 1914, is hereto attached.

Respectfully submitted,

In behalf of the Overseers of the Poor,
WILLIAM P. FOWLER, *Chairman.*

BOSTON, March 26, 1914.

WILLIAM P. FOWLER, ESQ.,

Chairman Overseers of the Poor:

SIR,— This is to certify that I have made a careful examination of the books and accounts of the Overseers of the Poor, and those relating to the trust funds, for the year ending January 31, 1914.

All moneys received were promptly deposited in bank, and for all payments I find on file full and satisfactory vouchers, and the same are properly entered in the books of record.

Respectfully submitted,

GEORGE S. CHASE,
Auditor.

FINANCIAL REPORT.

Statements of receipts and expenditures for the year ending January 31, 1914:

RECEIPTS.

Cash on hand February 1, 1912	\$5,520 39	
Drafts on City Treasurer and requisitions for Temporary Home and Wayfarers' Lodge	235,847 43	
Cash from cities and towns	12,074 82	
Cash from occupants of Charity Building for heating	1,437 39	
Cash from Commonwealth for relief	9,848 20	
Cash from state and other sources for burials	2,737 21	
Aid returned by paupers	52 52	
Cash for board in Temporary Home	164 38	
Receipts on account of aid in City Hospital:		
Cities and towns	\$21,854 80	
State of Massachusetts	25,916 28	
		47,771 08
Receipts from sale of old barrels, etc., by the Supply Department		98 96
Interest on deposits		183 79
		<u>\$315,736 17</u>

EXPENDITURES.

Amount paid for burials	\$2,785 30	
Amount paid cities and towns for relief of Boston poor	13,513 35	
Amount paid expenses Temporary Home	5,602 22	
Amount paid expenses Lodge for Wayfarers	13,130 38	
Amount paid pensions and grants at office	40,028 22	
Amount cash paid for relief of persons having no settlement, ...	3,487 30	
Amount paid for fuel, 1,079 tons of coal and 13½ cords of wood	10,061 07	
Amount paid for groceries and expense of delivery	63,964 87	
Amount paid salaries of treasurer and secretary	3,500 00	
Amount paid salaries of bookkeeper and clerks at office	8,997 89	
Amount paid salaries of visitors at office	14,374 39	
Amount paid pension	674 38	
Amount paid salaries of visitors and clerk at City Hospital, ...	4,744 11	
Amount paid office expenses	2,611 45	
Amount paid transportation	492 09	
Amount paid Charity Building expenses	6,314 98	
Amount paid medical attendance and medicine	329 60	
Cash paid City Hospital	47,762 30	
Cash paid towns for overpayments	8 78	
Cash paid City Collector	26,597 43	
Cash balance January 31, 1913	3,089 06	
Pensions and grants, chapter 763	43,667 00	
		<u>\$315,736 17</u>

PAYMENTS TO CITY COLLECTOR DURING THE YEAR.

Receipts from occupants of Charity Building for heating	\$1,437 39
Receipts from cities and towns	12,074 82
Receipts from the state for burials	1,816 40
Receipts from the state for relief of sick and wife settlement cases	3,278 27
Receipts from the state for temporary aid	7,076 12
Receipts for sundry burials	414 62
Receipts from paupers, aid refunded by them	52 52
Receipts for account Temporary Home, board of women and children	164 38
Receipts from sale of barrels by Supply Department	98 96
Interests on deposits	183 95
	<u>\$26,597 43</u>

EXPENDITURES ON ACCOUNT OF LODGE FOR
WAYFARERS.

Salaries	\$5,403 15
Groceries and provisions	3,875 52
Furnishing goods and furniture	488 22
Fuel, 90 tons of coal, 34 cords of wood	834 87
Repairs	1,030 13
Stationery and printing	34 37
Disinfectants and fumigating	27 83
Washing sheets and bedding	291 19
Gas and electric lighting	794 83
Medical supplies	191 76
Soap and soap powder	73 27
Ice	83 24
Boiler inspection	2 00
	<u>\$13,130 38</u>

EXPENDITURES ON ACCOUNT OF CHARITY
BUILDING.

Fuel, 400½ tons of coal, two cords of wood	\$2,460 09
Engineer's salary	1,701 08
Janitor's salary	1,219 53
Gas, \$63.50, and electric lighting, \$313.26	382 77
Furnishings	55 73
Cleaning	463 05
Disinfectant	23 25
Repairs	1 48
Washing powder	8 00
Deduct estimated cost of heating the Temporary Home, included in the above	\$1,868 14
Also amount received from occupants	1,437 39
	<u>3,305 53</u>
Net cost	<u>\$3,309 45</u>

EXPENDITURES FOR CITY TEMPORARY HOME.

Groceries, provisions, etc.	\$1,809 66
Salaries	2,374 16
Extra help	70 00
Fuel, 16 tons of coal, 3 cords of wood	142 04
Gas and electric lighting	277 28
Medical attendance and medicine	\$10 35
Confinement cases	580 00
	590 35
Furniture and household goods	51 53
Repairs	103 84
Sundries	22 51
Telephone rentals and tolls	29 78
Estimated cost of heating, included in Charity Building expenditures	1,868 14
Soap powder, soap	28 21
Ice	46 85
Stationery and postage	39 11
Clothing and bedding	16 90
	\$7,470 36
Deduct receipts for board	164 38
	<u>\$7,305 98</u>

TRUST FUNDS IN THE HANDS OF THE OVERSEERS OF THE POOR.

Pemberton Fund.— This fund comprises bequests and gifts made to the City of Boston from 1760 to the present time from "A. B.," Daniel Oliver, Margaret Blackader, Alice Quick, Anne Wheelwright, Mary Ireland, Benjamin Pemberton, Martha Stevens, Mrs. H. Driscoll, William Breed, Samuel Eliot, John Coffin Jones, Mary Belknap, "A Citizen of Boston," Anonymous, Miss Dr. Harriot K. Hunt, George Higginson, Walter E. Hawes, William B. Spooner, Rebecca A. Goddard, Matilda Goddard and Richard C. Humphreys. The most important, however, of the bequests was from Benjamin Pemberton, Esq., whose will was proved June 25, 1782, and for that reason his name has been given to the fund. The income of this fund is to be expended, at the discretion of the overseers, in semi-annual payments to the poor of the city.

Boylston Relief and Education Funds.— These funds were from a bequest by John Boylston, who died in London, England. His will was proved June 12, 1795. One portion of the bequest is ordered to be paid to "poor and decayed householders of the town of Boston, not under fifty years of age, persons of good character, and reduced by the acts of Providence, not by indolence, extravagance, or other vice." The other portion to be applied to the "nurture and instruction of poor orphans and deserted children of the town of Boston until fourteen years of age."

Mason Fund.— A bequest from Jonathan Mason, by will dated July 15, 1798, interest to be paid annually "to the standing chaplain of the almshouse and workhouse, or by whatever other name called"; interest to be added until one is appointed. The interest is now paid semi-annually towards the salaries of the chaplains of the House of Industry.

Dexter Fund.— A bequest from Samuel Dexter, by will dated May 7, 1811, "for supplying with firewood or coal such poor persons, objects of charity, as are not supported in the almshouse though sometimes relieved by the Overseers of the Poor."

Statement of Trust Funds in the Hands of the Overseers of the Poor, William P. Fowler, Treasurer, January 31, 1914.

INVESTMENTS.	Pemberton or General Fund.	Boylston Education Fund.	Boylston Relief Fund.	Mason Fund.	Dexter Fund.	Jeffries Fund.	Lucy Bullman Charity.	David Sears Charity.	Pierce Fuel Fund.	Holton Protestant Pauper Fund.	Holton Protestant Poor Fund.	Stoughton Poor Fund.	Goodnow Fund.	Rachel T. Stevens Fund.	Moses Hunt Fund for the Destitute.	Nathaniel Frederic Thayer Fund.	Thorndike Fund. Income.	Totals.	
United States 2 Per Cent Treasury Bonds.....				6	\$7,300 00													\$7,300 00	
Massachusetts Water Loan 3½ Per Cent Gold Bonds.....																5	\$5,000 00	5,000 00	
City of Boston Currency Notes.....	28	\$161,030 00	22	\$158,500 00	15	\$34,500 00	4	1,850 00	9	\$7,100 00	11	\$10,250 00	23	\$34,250 00	19	\$281,500 00	1	\$1,500 00	749,500 00
Fifty Associates' Corporation Stock.....																		22,800 00	
Real Estate.....																2,200 00		45,766 32	
Merchants National Bank Stock.....	30	9,000 00																9,000 00	
Union National Bank Stock.....	32	3,200 00	28	2,800 00														6,000 00	
Investments.....		\$173,200 00		\$158,500 00		\$37,300 00		\$9,150 00		\$7,100 00		\$10,250 00		\$34,250 00		\$347,866 32		\$1,500 00	\$845,366 32
Cash.....		3,761 63		1,532 40		3,124 34		269 46		347 68		294 11		871 64		662 32		119 14	13,237 49
Cash overdrawn.....																			
Totals.....		\$176,961 63		\$160,032 40		\$40,424 34		\$9,419 46		\$7,447 68		\$10,554 11		\$35,121 64		\$348,528 64		\$1,619 14	\$858,603 81
Total January 31, 1913.....																			855,761 53
Increase.....																			\$2,842 28

* Assessors' valuation for 1908, \$112,000.

Boerum, January 31, 1914.

WILLIAM P. FOWLER, Treasurer.

TRUST FUNDS.—Cash Accounts, February 1, 1913, to January 31, 1914.

	PEMBERTON FUND.		BOYLSTON EDUCATION FUND.		BOYLSTON RELIEF FUND.		MASON FUND.		DEXTER FUND.		JEFFRIES FUND.		LUCY BULLMAN CHARITY.		THE DAVID SEARS CHARITY.		PIERCE FUEL FUND.		HOLTON PROTESTANT PAUPER FUND.		HOLTON PROTESTANT POOR FUND.		STOUGHTON POOR FUND.		GOODNOW FUND.		RACHEL T. STEVENS FUND.		MOSES HUNT FUND FOR THE DESTITUTE.		NATHANIEL FREDERIC THAYER FUND.		THORNDIKE FUND INCOME.		TOTALS.				
	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.			
Cash January 31, 1913.....	\$3,200 38		\$2,102 26		\$1,819 43		\$265 02		\$355 38		\$192 69		\$110 92		\$1 66		\$135 82		\$375 34				\$54 27		\$381 71		\$65 82		\$31 87		\$513 88		\$62 66		\$9,380 21				
RECEIPTS.																																							
City notes paid.....			1,000 00		1,000 00																														2,000 00				
Bank dividends, including tax refunded by the state.....	979 40		45 60		328 89																															1,353 89			
Interest on city notes.....	5,707 50		5,627 50		1,305 00		67 26		256 00		370 00		\$1,232 50		\$10,595 00		52 50		176 26		\$45 00		163 00		365 00		135 00		\$443 74		648 74		435 00		27,625 00				
Interest on United States Bonds.....							146 00																													146 00			
Rebate on rental of safe.....	7 50																																				7 50		
Interest on bonds.....																																					262 50		
Interest on deposits.....	56 85		37 03		61 36		6 41		6 26		6 42		12 06		71 25		2 57		10 63		28		3 11		11 47		5 02				10 89		5 19		306 80				
Rents.....													1,412 50		2,067 67																					3,682 27			
Dividends on Fifty Associates' Stock.....															2,850 00																					2,850 00			
PAYMENTS.																																							
Paid for city notes.....				\$990 33		\$990 34																															\$1,980 67		
Pensions.....		\$6,160 00				400 00						\$275 00			14,350 00									\$75 00		\$275 00		\$175 00		425 00		\$775 00					22,910 00		
Board of thirty-eight boys and girls.....				6,289 66																																	6,289 66		
Grants.....													1,674 50						\$44 00																	1,718 50			
Paid salaries of chaplains at institutions.....								\$215 23																													215 23		
Paid for turkeys for Brighton poor.....																			41 29		\$45 28															86 57			
Paid tax on real estate in Somerville.....																											71 40										71 40		
Paid for repairs, insurance, etc., on Longwood estate.....														569 94																							569 94		
Paid rent of safe.....		30 00																																				30 00	
Coal.....									\$269 96									\$71 75																			\$163 00		
Cash January 31, 1914.....		3,761 63		1,532 40		3,124 34		269 46		347 68		294 11		871 64		662 32		119 14		476 94				145 38		483 18				661 01		339 85					13,237 49		
Cash overdrawn.....																											161 54		13 13										
Totals.....	\$9,951 63	\$9,951 63	\$8,812 39	\$8,812 39	\$4,514 68	\$4,514 68	\$484 69	\$484 69	\$617 64	\$617 64	\$569 11	\$569 11	\$2,657 06	\$2,657 06	\$15,583 92	\$15,583 92	\$190 89	\$190 89	\$562 23	\$562 23	\$45 28	\$45 28	\$220 38	\$220 38	\$758 18	\$758 18	\$407 94	\$407 94	\$456 87	\$456 87	\$1,436 01	\$1,436 01	\$502 85	\$502 85	\$47,614 17	\$47,614 17			

Boston, January 31, 1914.

WILLIAM P. FOWLER, Treasurer.

Jeffries Fund.— A bequest by David Jeffries, former Town Treasurer. Will dated January, 1786: "Income to be applied to the purchase of tea, coffee, chocolate, and sugar for the refreshment of those persons, who in the providence of God, are, or shall be, reduced and obliged to take shelter in the almshouse, after having lived reputably; the Overseers of the Poor to be judges as to the persons, but always giving the preference to the pious poor."

In 1908 the Supreme Court decreed that in addition to the above provisions of the will the income of this fund could be used by the Overseers of the Poor in their discretion for the benefit of Boston poor outside of the almshouse.

Lucy Bullman Charity.— Consists of an estate on Cambridge and Joy streets, in this city, which came into the possession of the City of Boston in accordance with the will of Lucy Bullman, proved at Probate Court, Suffolk County, January 9, 1832, in which it is provided that, upon the death of certain persons therein named, said estate is given to the City of Boston upon the condition that the estate should never be sold, but the income used for the benefit of the poor. By a vote of the City Council, approved by the Mayor January 4, 1873, this estate was placed in charge of the Overseers of the Poor.

The David Sears Charity is a fund contributed by the late Hon. David Sears for the relief of the poor, the income only to be expended "in aid and for the support of citizens or families who may have seen better days, and for charity in all its forms in such a manner as may best tend to alleviate the sufferings of human life and render the condition of the poor more comfortable."

Pierce Fuel Fund.— The legacy of Caleb Pierce to the city of Charlestown, accepted by the City Council of that city May, 1861: "Income to be expended in the purchase of fuel to be distributed to those indigent widows whose husbands, before their decease, had resided in Charlestown at least one year, and the said widows still continuing to reside in Charlestown at the time of receiving said bounty."

Holton Protestant Poor Fund.— A bequest by James Holton to the inhabitants of the town of Brighton: "Income to be annually expended forever in purchasing and distributing provisions among poor and indigent Protestant families in said town of Brighton on Thanksgiving or other holidays, or just previous to such holi-

days, to the end that such poor Protestant families may have the means, in some degree, of enjoying such holidays in common with their fellow-citizens; and I especially direct that in such periodical distributions unmarried Protestant females who are poor and needy shall receive a liberal share of provisions, and also other articles of comfort, such as such distributors shall deem to be the most conducive to the comfort and happiness of that lone class of citizens."

Holton Protestant Pauper Fund.—A bequest by James Holton to the inhabitants of the town of Brighton: "Income to be annually expended, in whole or in part, as necessity or circumstances may require, by the selectmen of said town, in providing good and plentiful meals on Thanksgiving Day, or other holidays, to the Protestant paupers of said Brighton. If the whole of said income shall not be required to be so expended, then the surplus shall be added to the principal, and if such principal shall ever become thus augmented to three thousand dollars or more, then the surplus interest or income, over what shall be necessary for furnishing said festive meals on said holidays, may be expended by said selectmen for the comfort of the Protestant paupers of said Brighton in such a manner as said selectmen shall judge best and most conducive to the comfort and happiness of such paupers."

Stoughton Poor Fund.—A bequest of Lieut. Gov. William Stoughton, who died July 7, 1701. By his will he gave £50 to the relief of the poor of Dorchester, to be improved by the care of the selectmen, the income to be distributed to the most needy inhabitants.

Goodnow Fund.—A bequest of Elisha Goodnow (to be paid over upon the decease of his wife) to the City of Boston and its assigns, "to be invested and the income applied forever to and for the relief, assistance and support of the poor, sick, and infirm in said city, not supported by the said city in its almshouse, in such manner as the said city, or the government or officers thereof, may deem most judicious, but without reference to the religious faith or belief of those who may apply for or need the assistance of this fund." Five thousand dollars, received April 29, 1885.

Rachel T. Stevens Fund.—A bequest of Rachel T. Stevens, the net income to be paid (after the death of a person named in the will) "for the support and maintenance of poor, worthy, Protestant single women of

Boston, who have arrived at the age of 50 years (not including widows), paying to each of such women during her life the sum of one hundred dollars in semi-annual payments. Upon the marriage of any beneficiary under this will no further payment of money is to be made to her, nor is any further payment of income to be made to any beneficiary who becomes unworthy of help under this trust."

Moses Hunt Fund for the Destitute.—A legacy from the late Moses Hunt: "The income to be devoted to the relief and welfare of Protestant destitute residents of that part of said Boston which was Charlestown." Ten thousand dollars, received March 7, 1889, has been invested in a City of Boston note.

Nathaniel Frederic Thayer Fund.—A bequest of Caroline C. Thayer (who died about 1891), to be paid over to the city after the death of two sisters, the last of whom died in September, 1899. The fund was received in May, 1900. "Income to be annually appropriated for the benefit and use of Protestant widows and single women, without distinction of color, preference always to be given to those who have seen better days."

In August, 1900, a small sum was received under the will of Susan T. Balch, which was added to this fund in accordance with the wish of the donor.

Thorndike Fund.—Extract from will of George L. Thorndike, proved June 11, 1901: "I give, devise, and bequeath to the City of Boston ten thousand dollars (\$10,000) in trust forever; the income from the same is to purchase coal to be distributed to deserving widowed women of East Boston." By a vote of the City Council, approved by the Mayor December 19, 1907, the income of the fund is paid to this Board.

OVERSEERS OF THE POOR, 1913-14.

One-third of the Board is appointed annually by the Mayor, subject to the approval of the Civil Service Commission.

Terms expire April 30, 1914.

SIMON E. HECHT.
MILES MARTIN, M. D.

P. ROBERT GREENE.
FRANKLIN P. DALY.

Terms expire April 30, 1915.

MATTHEW J. MULLEN.
JOSEPH A. TURNBULL.

JOHN H. FITZPATRICK.
MARGARET LEAHY.

Terms expire April 30, 1916.

WILLIAM P. FOWLER, *Chairman*. MARGARET J. GOOKIN.
THOMAS SPROULES. THOMAS F. LALLY.

WILLIAM P. FOWLER, *Treasurer*.
BENJAMIN PETTEE, *Secretary*.

The Board meets on the first Wednesday of every month at its office in Charity Building.

The Overseers of the Poor are likewise incorporated as a Board of Trustees of John Boylston and other charitable funds, left for the assistance of persons of good character and advanced age, "who have been reduced by misfortune to indigence and want."

COMMITTEES.

Investigation and Relief.

Messrs. Fowler and Sproules, Mullen, Turnbull and Mrs. Gookin, and Messrs. Hecht and Greene.

Office Matters.

Messrs. Sproules, Fowler and Martin.

Finance and Accounts.

Messrs. Hecht, Greene and Fitzpatrick.

Employments and Settlements.

Messrs. Mullen, Lally and Miss Leahy.

Supplies.

Messrs. Turnbull, Fowler and Hecht.

Temporary Home.

Mr. Sproules, Mrs. Gookin and Miss Leahy.

Lodge for Wayfarers and the Woodyard.

Messrs. Fowler, Martin and Fitzpatrick.

Building.

Messrs. Mullen, Turnbull and Martin.

Real Estate.

Messrs. Daly, Sproules and Fitzpatrick.

Medical Affairs and Hospital Matters.

Dr. Martin, Mrs. Gookin and Mr. Daly.

Burials.

Messrs. Turnbull, Mullen and Lally.

Boylston Education Fund Beneficiaries.

Mrs. Gookin, Messrs. Hecht and Daly.

Holton Funds.

Messrs. Lally, Greene and Miss Leahy.

Licenses for Receiving Contributions in Public Places.

Messrs. Greene, Lally and Daly.

MEMBERS OF THE BOARD FROM ITS REORGANIZATION IN 1864.

[Overseers of the Poor were first chosen in Boston in 1691.]

-
- * Allen, Ira, 1868 to 1875 (died August 29).
 - * Amory, Thomas C., 1864 to April, 1883.
 - * Atkins, Ebenezer, 1864 to December 31, 1867 (died).
 - * Ayer, James B., April, 1890, to May, 1893.
 - * Bailey, Joseph T., November, 1866, to 1871.
 - * Bigelow, Alanson, 1875 to April, 1881.
 - * Blasland, Thomas, 1866 to 1873 (died September 5).
 - Brant, John, May, 1903, to 1912.
 - * Buckley, Joseph, 1864 to 1875.
 - * Burnham, Daniel S., from April, 1885, to May, 1891.
 - Cabot, Frederick P., July, 1908, to May, 1912.
 - * Calhoun, William I., from May, 1912, to death,
November, 1913.
 - Campbell, B. F., October, 1882, to July, 1888.
 - * Campbell, Isaac T., 1873 to June, 1899 (died).
 - * Caton, Asa H., December, 1890, to 1893.
 - * Colby, John H., May, 1908, to September, 1909 (died).
 - Coleman, Charles, 1893 to May, 1896.
 - Conley, James H., May, 1900, to September, 1906.
 - * Crane, P. M., 1870 to 1882 (died August 13).
 - * Cruft, Samuel B., 1871 to 1877.
 - Cunningham, Henry V., 1893 to April, 1898.
 - * Curry, M. C., 1883 to May, 1896.
 - * Curtis, George, 1876 to September, 1878.
 - Daly, Franklin P., May, 1911, to date.
 - Davis, James G., 1880 to 1886.
 - * Day, Frederick W., May, 1898, to January, 1899.
 - Derby, William P., October, 1907, to May, 1908.
 - * Dore, John P., 1879 to May, 1891.
 - Downey, Thomas, Jr., 1887 to April, 1890; May, 1891,
to January, 1895, and May, 1902, to May, 1910.
 - * Fabyan, George, 1869 to 1874 (died May 25).
 - * Fisher, Andrew P., from April, 1889, to May, 1893.
 - Fitzpatrick, John H., from May, 1912, to date.
 - Folsom, Martha W., November, 1900, to 1912.
 - Fowler, William P., from April, 1889, to date.
 - * Friedman, Solomon, 1886 to December, 1890.
 - * Gargan, Thomas J., 1874 to 1875.

- Gookin, Margaret J., May, 1908, to date.
- * Gorman, William, 1877 to 1880 (died January).
 - * Greene, Patrick J., October, 1900 (died March 27, 1910).
 - Greene, P. Robert, May, 1910, to date.
 - * Griffin, Martin, 1864 to 1869.
 - * Hale, George S., 1865 to 1871.
 - Hecht, Simon E., May, 1908, to date.
 - * Hull, Liverus, 1874 to April, 1883.
 - * Humphreys, Richard C., May, 1890, to September, 1898.
 - Hyneman, Bernard, May, 1902, to May, 1908.
 - Jordan, Michael J., May, 1902, to May, 1903.
 - * Kerrigan, Michael A., April, 1898, to October, 1900 (died).
 - Lally, Thomas F., June, 1910, to date.
 - * Lamb, John, 1891 to May, 1897.
 - * Lawrence, William R., 1864 to November, 1865.
 - Leahy, Margaret, January, 1914, to date.
 - * Lincoln, F. W., May, 1867, to April, 1878.
 - * Little, James L., November, 1865, to November, 1876.
 - Logue, Charles, May, 1896, to January, 1898.
 - * Lothrop, Loring, 1864 to April, 1870.
 - * McLean, Charles R., 1868 to 1871.
 - Madden, Daniel A., 1883 to April, 1889.
 - Martin, Miles, M. D., November, 1909, to date.
 - Mullen, Matthew J., July, 1897, to May, 1900, and May, 1906, to date.
 - * Nazro, Frederic H., March, 1900, to May, 1902.
 - Newell, Otis K., from July, 1888, to May, 1891.
 - * Newmarch, S., 1864 to 1865.
 - * North, Frederic O., May, 1905, to May, 1908.
 - O'Brien, John, 1871 to 1874.
 - O'Brien, Louise S., April, 1898, to May, 1901.
 - * Parker, Augustus, November, 1878, to April, 1880.
 - Parker, Charles F., June, 1895, to May, 1898.
 - * Parker, F. E., 1864 to 1875.
 - Patton, John S., May, 1902, to May, 1904.
 - * Pickering, H. W., 1875 to April, 1884.
 - Pierce, J. Homer, from October, 1898, to April, 1902.
 - Plummer, Henry L., M. D., January, 1899, to May, 1902.
 - Prescott, Washington L., 1875 to December, 1878.
 - Quinn, Annie E., May, 1899, to May, 1908.
 - * Richards, Henry L., 1877 to August, 1878.

- * Richards, Joel, 1864 to 1866.
- * Ring, Thomas F., November, 1878, to April, 1887.
Rogers, Annette P., 1891 to October, 1900.
- * Sawin, Samuel D., April, 1884, to July, 1890 (died).
Sawyer, Edwin F., May, 1904, to May, 1907.
- * Scott, John A., April, 1881, to April, 1884.
- * Spooner, William B., 1864 to 1868.
- * Spooner, William H., May, 1901, to May, 1905.
Sproules, Thomas, 1883, to date.
- * Stackpole, Stephen A., 1880 to April, 1883.
Stuart, Frederick W., December, 1896, to April, 1906.
- * Sullivan, Daniel F., 1893 to June, 1895.
- * Sweetser, John, December, 1878, to April, 1879.
- * Temple, Thomas F., 1870 to April, 1890.
Thorndike, Rachel E. S., May, 1896, to April, 1899.
Turnbull, Joseph A., October, 1906, to date.
- * Turner, John, September, 1890, to May, 1893, and
January, 1895, to November, 1896.
- * Warren, John W., 1864 to April, 1866.
Welch, William J., April, 1884, to April, 1889.
- * Willcutt, Levi L., 1878 to April, 1885.
- * Winthrop, Robert C., 1864 to May, 1867.
Wolcott, Edith P., 1893 to May, 1901.

Chairmen.

- * Winthrop, Robert C., July, 1864, to May, 1867.
- * Lincoln, F. W., June, 1867, to April, 1878.
- * Temple, Thomas F., April, 1878, to December 31, 1878,
and from April, 1881, to April, 1890.
- * Amory, Thomas C., January, 1879, to April, 1881.
Newell, Otis K., April, 1890, to May, 1891.
Fowler, William P., May, 1891, to date.

Treasurers.

- * Warren, John W., July, 1864, to January, 1865.
- * Norcross, Otis, January, 1865, to January, 1876.
- * Higginson, George, 1876 to 1878.
- * Lincoln, F. W., 1878 to September 13, 1898 (died).
- * Humphreys, Richard C., November, 1898, to May,
1912 (died).
Fowler, William P., May, 1912, to date.

Secretaries.

- * Pratt, John, July, 1864, to November, 1874 (died).
Pettee, Benjamin, November, 1874, to date.

OCCUPANTS OF CHARITY BUILDING.

Basement Rooms.

City Physician	Nos. 11, 13 and 14
Federation of Jewish Charities	“ 3, 4 and 5

First-story Rooms.

Overseers of the Poor	Nos. 15 to 20 and 27
Commissioner of State Aid	“ 21 to 24 and 28
Industrial Aid Society	Nos. 25 and 26

Second-story Rooms.

Associated Charities	Nos. 30 and 31
Districts 8 and 9 Conferences, Associated Charities	No. 37
Boston Provident Association	Nos. 32, 33, 38 and 40
Society of St. Vincent de Paul	Nos. 35 and 36
German Aid Society	No. 39

Third-story Rooms.

Hall for general meetings	No. 41
Massachusetts Babies' Hospital has desk room in	“ 41
Boston Children's Aid Society	Nos. 43 and 50
Associated Charities	“ 47 and 49
Co-operative Society	No. 48
District 7 Conference, Associated Charities	“ 51

SCHEDULE OF PROPERTY IN CHARGE OF THE BOARD FEBRUARY 1, 1914.

Charity Building.—The four rooms occupied by the Board and its officers have furniture needed for their use, desks, cases, chairs, etc.

City Temporary Home is supplied with furniture necessary to provide temporary accommodations for homeless women and children.

The Lodge for Wayfarers, for men, has furniture suitable for its use. At the lodge there are about 140 cords of wood, and we have on storage about 80 cords more.

In a storehouse in the yard of the Charity Building are the following groceries for delivery to the poor, also store fixtures:

5,368 lbs. sugar.	417 cans condensed milk.
901½ lbs. tea.	67 lbs. cocoa.
1,583 bars soap.	78 bottles olive oil.
272 lbs. Indian meal.	76 bushels potatoes.
1,966 lbs. rice.	4¼ bushels peas.
1,241 lbs. salt pork.	44 lbs. cotton twine.
17⅞ bbls. flour.	48 lbs. jute twine.
15 packages paper bags.	7,000 tags.
307 baskets.	125 cans syrup.
15 bundles paper.	1,054 cans tomatoes.
38 bushels beans.	314 lbs. macaroni.
602 lbs. oatmeal.	110 cans conserve.
1,204 lbs. salt fish.	



ANNUAL REPORT
OF THE
PARK AND RECREATION DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

DEAR SIR,—The Board of Park and Recreation Commissioners herewith presents the annual report for the year 1913–14.

Owing to the retirement of the former Board the compiling of this report has devolved upon the present Board and therefore is respectfully submitted.

JOHN H. DILLON, *Chairman.*
CHARLES GIBSON.
THOMAS F. GALVIN.

REPORT OF THE DEPUTY COMMISSIONER.

TO JOHN H. DILLON, CHARLES GIBSON AND THOMAS F. GALVIN, *Commissioners*:

GENTLEMEN,— I herewith submit a report of work performed in the department during the year ending January 31, 1914.

During the first month of the year the consolidation of the Park, Public Grounds, Bath and Music Departments into the Park and Recreation Department became an established fact and all employees of these four departments by virtue of the city ordinance and a vote of the new Board became legal employees of the new department.

The election of the secretary and a deputy commissioner followed immediately. These appointments received the sanction of the Civil Service Commissioners.

This report will cover as briefly as possible all matters of interest.

The improvements on Boston Common were continued in the neighborhood of the Parkman memorial bandstand, a contract being let for \$8,250, including soil renovation, drainage and laying of brick walks.

At Franklin Park the improvements to the Zoo consisted of the addition of three ranges for buffalo, deer and elk, the establishment of a raccoon cage in Long Crouch Woods, under two contracts, one for \$1,736.25 for the cage, and one for sewer and water service amounting to \$1,074.50. The floor of the duck pond was concreted, contract price \$2,090.

Sanitary accommodations at the bird house were provided for under contract price of \$7,994.

The bridge over the railroad at Charlesgate West, at the entrance to the Fens, having settled at the abutments, a contract was made to raise it for \$6,700; the necessary changes in the approaches of both street and walks and the side walls were made by the department force.

The new shelter and sanitary at the boat landing at Jamaica Pond, erected at a cost of \$18,696.10, were completed and opened to the public.

At Governor's Island a flight of granite steps was built from the upper concourse to the landing on the upper promenade, and this promenade was graded and surfaced with stone for a distance of about 800 feet, behind the bastions and as far as the citadel itself. The walks from the wharf leading to the upper concourse were planted with two rows of English elms on each side and this planting was carried on by the upper promenade, and the line trees were flanked by groups of silver and Carolina poplars.

At Copp's Hill terrace a contract was made for the erection of a sanitary and shelter building and a concrete terrace floor to be used as a play space for children; the amount was \$16,786.

The sanitary building for children at the Prince Street Playground was finished and opened for use.

Iron fences were erected at Concord and Rutland squares at a contract price of \$3,674.

At Tyler Street Playground a contract was made to erect a shelter and pergola and an iron fence and grade the playground, price \$10,835; this work was completed but the playground is still of little use as the municipal building adjoining is unfinished. The tile roof of the shelter and pergola is not suited for this class of work and should be substituted by other roofing material in all future buildings of this nature.

Orchard Park improvements were carried on under three contracts: Grading, drainage, walks and wading pool, \$5,868.95; iron fences and railings, \$1,757.10; shelter, \$3,221.

At Wood Island Park a new bath house to replace the old one burned was erected at a price of \$15,450.

At Rutherford Avenue Playground in Charlestown, contract was made for a locker building, price \$11,687.

At Mystic Playground a fence was erected along the sea wall at the price of \$898.

The grading of this playground was completed on contract price of \$1,525.75.

The Norfolk Street Playground in Dorchester was improved by the erection of a locker building, price \$13,594; a contract was let for the grading of the ball field, price \$8,639.10.

The small playground in Charlestown adjoining Dewey Beach, improved by grading and fencing and the erection of a sanitary building; contract unfinished; price, \$20,286.

At Carolina Avenue Playground in Jamaica Plain a small locker building is under construction, the contract price of which is \$8,765.

The department acquired land as follows during the year: A playground in Ward 19 with land on both sides of Phillips street, containing in all about $2\frac{1}{2}$ acres taken by right of eminent domain.

The area of Savin Hill bathing beach was increased by the taking of land adjoining the present holdings of the department; the area acquired contains 65,053 square feet of upland and 551,000 square feet of flats.

At Hyde Park the department acquired 20 acres of marsh land for playground purposes by transfer from the Metropolitan Park Commission. The location is commonly known as Smith's Pond and would be of great value if it included the high ground on the easterly side of the marsh bordering on Brainard street; the material in this bank would be used in filling the low land; this, however, the Metropolitan Commission was unwilling to transfer. A tract of land near the Neponset river, containing about three acres, was presented to the department by William H. Wood.

The department force was engaged, in addition to the regular maintenance work, on various kinds of work for which special appropriations were available; among these I might mention grading and leveling of the newly purchased playground, Ward 19; fencing John Winthrop Playground; grading, drainage and surfacing of additional tennis courts at Franklin Field; erection of grandstand at speedway on Franklin Field; grading, drainage, loaming and planting Portsmouth Street Playground; grading and fencing Paris Street Playground; loaming and planting Billings Field; location of permanent concrete post seats at Marine Park, Massachusetts avenue, Washington Park, Madison Park, Meeting House Hill, Sullivan square, Columbus circle, Olmsted and Franklin Parks.

Temporary walks were laid out at Franklin Park to accommodate the great crowds of people visiting the Zoo.

The permanent walks around the bird house, the flying cage and the duck pond were built, and the planting of the island and shores of the duck pond completed during the year.

The bird house was formally opened to the public on Columbus Day, and the ceremony was largely attended.

At Franklin Field the playground for children was regraded and additional swings and tilts erected.

The usual cooperation with the School Department was carried on in connection with the children's corners and the installation of new apparatus both at these corners and at the schoolyard playgrounds was made by our force of mechanics.

The one pressing problem of the year was, of course, the deterioration of the road surfaces.

This was notably so on Commonwealth avenue, between Beacon street and Brighton avenue, where during the two previous seasons a stretch of bituminous macadam was laid down, and one year's wear showed conclusively that such treatment was not fitted for that kind of traffic. This road surface while quite satisfactory for automobile traffic will not stand up under heavy teaming; in fact, it is quite clear that only granite or wood block pavement can stand the latter use.

Planting was carried on at Franklin Park where about 600 coniferous trees were set out at Pine Hill, Juniper Hill and the Wilderness; 200 poplars were planted in the vicinity of the bear dens and bird house; 100 oaks through the plantation at Franklin Park; 50 English elms were planted in prepared pits on the site of the proposed Greeting; 300 *Cornus Florida* were planted in the Wilderness and at Scarboro Hill. The rhododendron plantation at Ward's Pond was extended and the shores of the Riverway and Fens were planted with many kinds of iris and with *lythrum*, *hibiscus* and other semi-aquatics.

In addition there were planted at Chestnut Hill Park and upper Commonwealth avenue 200 oaks and 150 other trees. Playgrounds planted were Portsmouth Street, John Winthrop and Billings Field.

At the Strandway white willows were planted around the shelter, at the children's corner and in the reservation near the Columbia Yacht Club.

At Governor's Island 500 trees were planted along the concourse and promenade.

Highland Park was extended by the purchase of one acre of ground at the corner of Fort avenue and Beach Glen street, price \$10,000.

Respectfully submitted,

JAMES B. SHEA,
Deputy Commissioner.

REPORT OF THE SUPERINTENDENT OF BATHS.

TO JOHN H. DILLON, CHARLES GIBSON AND THOMAS F.
GALVIN, *Commissioners*:

GENTLEMEN,— I beg to submit herein a report of the activities of this department for the year ending January 31, 1914.

The close of the fiscal year just ended marks the first completion of all the activities that are conducted in a calendar year since the consolidation of the former Park, Public Grounds, Bath and Music Departments of the city into the present organization. The merging of these four units, more or less interdependent, into one department or clearing house has resulted in a more cohesive system with its attendant harmony of action. Plans and their fruition are more easy of accomplishment, for the end and the means are now under one directing body. The administration of the public playgrounds, gymnasia and baths and their correlative activities, as a consequence, is now rendered smooth and free from delays.

The year just closed was a fruitful one, as the features incident to the recreation branch of the department were carried out to a successful conclusion. The gymnasium work from October to March and the playground program from June to September, with its list of athletic games and swimming events, enlisted the healthy interest of thousands of our citizens of both sexes and all ages. The efficiency of the indoor baths throughout the year was attested by the thousands that had recourse to their benefits. The summer season, from June 15 to September 15, saw the eight beaches and eleven floating baths situated throughout the city thronged daily during the warm weather, and on many occasions, despite the unexcelled advantages which the city affords its citizens in this respect, their number and facilities proved far inadequate to meet the demand.

The department, as is customary, held a series of swimming races for boys and girls at all the beaches —

every section was provided for and all had an opportunity in their sectional baths to prove their merit in competition for the handsome prizes which the department awarded to the first three place winners in each event. The winners in the preliminary events met in the finals for the championship of the city.

The athletic games were conducted in a similar manner and were divided into junior, intermediate and senior divisions. The number of competitors was large and the caliber of their performance gratifying.

The character of the work in the gymnasias of the department still attracts a growing patronage each year. The civil service classes for candidates for the Fire and Police Departments of the city are worthy of special commendation. The physical efficiency of these two branches of the public service in a large manner can be attributed to the preliminary work in our gymnasias.

The salutary effects of public gymnasias and baths in any country, now readily recognized, leads us into the belief that the public health can be better conserved by the construction of additional houses of this character in sections hitherto unprovided for. This rule especially pertains to the West End, Brighton and our new acquisition, Hyde Park. No expenditure by the city can show more profitable returns in health and happiness. The gymnasium permits us to carry out the summer work on the playgrounds during the inclement months of the winter, thus providing the ideal program all the year round of recreation and play.

The burning of the boys' quarters at Tenean Beach during the winter made necessary the reconstruction of this building on the former lines and dimensions.

The opening of the third building in Charlestown filled a long-felt want on the part of the citizens of this section of the city. It has a gymnasium and shower room and as no building of this type has ever been in evidence in this residential quarter, its value as a contributing factor in promoting health and recreation cannot be overestimated.

A new and substantial brick building was also constructed on Dewey Beach in Charlestown to replace the former dilapidated affair. The new building has commodious quarters for both men and women, with a modern shower room and toilet facilities. Its capacity was taxed almost daily during the open season.

The presence of a newly constructed floating bath at Fort Point channel, near the South Station, was appreciated by many whose duties in the nearby factories and workhouses made a midday plunge bath inviting and resuscitative.

The opening of such buildings as are now under construction in the South End and South Boston will prove decided boons to the people of these districts. The South Boston building will have a permanent daily shower room for both men and women, while the South End building will be equipped with a spacious gymnasium and shower rooms.

Since the last annual report the work outlined by the former Board of Music Trustees has been continued by the newly organized Park and Recreation Department and the improvements made in the character of the work has aided in a large measure towards the increased success that has been attained. During the year 136 concerts of various types were given and paid for out of the Park and Recreation Department appropriation. Of the 136 concerts mentioned, 85 were given during the summer season and 51 were given during the winter season. All were successfully conducted and well attended. At the 85 summer concerts it is estimated that 564,500 people attended, while at the winter concerts an actual attendance of 37,039 was recorded. The total attendance for the year at these concerts was therefore 601,539.

A series of municipal dances were held in the gymnasias of the department and proved an unqualified success. The patrons were drawn for the most part from the gymnasium classes and they, with their friends, were given the privilege of indulging in an evening's social intercourse when dancing was enjoyed under proper auspices.

The necessity of having all public celebrations of an athletic or recreative nature under the patronage of this department is potent. The Park and Recreation Department has the trained men, the facilities and all the paraphernalia suitable for affairs of such a character. All the holiday festivities are now conducted by this department, and the development of this policy should be sought even further.

The wide range of our activities and the immeasurable results of a healthy and recreative nature that accrue

to the community as a whole render this department one of the most salutary and beneficial of the many city departments. Our facilities reach the individual and the public as a whole, alike, transforming all into better, healthier and more contented citizens, and proving most convincingly our claim of being a sane and provident municipality.

Respectfully submitted,

HUGH C. McGRATH,

Superintendent of Baths.

REPORT OF THE PHYSICAL DIRECTOR OF THE PARK AND RECREATION DEPARTMENT.

TO JOHN H. DILLON, CHARLES GIBSON AND THOMAS F. GALVIN, *Commissioners*:

GENTLEMEN,—In presenting the yearly report of conditions and statistics concerning the activities under my supervision, I think it is worthy of especial mention to note the increased attendance everywhere. In those districts where new and spacious quarters have replaced old and cramped ones, a renewal and revival of interest was of course looked for, and the difference in comparative attendances is not so startling as the figures would seem to indicate. But in other gymnasiums which have been in operation for several years and where interest has had the usual reactive chance to grow lax, the attendance has been gratifyingly larger than in many former years.

At Columbia road in its eleventh year of existence, every one of which has recorded tremendously large classes, the attendance was greater than it has been any year since the opening in 1904.

There are now nine large gymnasiums, with two more in process of construction, and since the opening of Charlestown's Municipal Building last year with its fine facilities for this work the city's districts are fairly well covered.

The cry for instruction and knowledge of the modern dancing was met to some degree by introducing steps in the classes which carried out this style in a modified form.

Demonstrations of the year's work by all the classes were held at each gymnasium at the close of the season as has been the custom.

The instructors were placed in charge of the various municipal playgrounds during the summer instead of at the beaches as heretofore.

Instruction in athletics in its various forms was given and district and interdistrict meets were held every Saturday, covering the entire city.

Swimming competitions also were held weekly.

Carrying this idea out to a grand finish, there was a final meet held at Franklin Field at the close of the season in which winners in the previous district meets competed. Gold, silver and bronze medals were awarded.

The same plan for a season finish was made in the swimming competitions, and at the Charles River Basin there was an interesting and exciting close to the weekly contests.

Baseball was by far the most popular of the outdoor features, and games were played regularly every Wednesday and Saturday.

During the extreme hot weather the instructors of playground athletics took their boys to the nearest bathing beach and there gave them instruction in the various swimming strokes and in life-saving and resuscitation. This formerly was a regular feature of routine when the men were engaged at the various public beaches during the summer instead of at the playgrounds as at present.

The work of the instructors this year merits special approbation as it was performed under trying conditions.

Respectfully submitted,

JAMES L. WALSH,
Physical Director.

PARKS, PLAYGROUNDS AND ROADS.

COST OF MAINTENANCE PER ACRE, 1904 TO 1913, INCLUSIVE.

PLAYGROUNDS.	Acres.	COST PER ACRE.									
		1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Ashmont Playground.....	2.200	\$24	\$332	\$439	\$422	\$332	\$341	\$805	\$948	\$105	\$970
Billings Field.....	11.000	102	88	92	112	77	139	157	238	268	277
Carolina Avenue Playground.....	* 3.100	.....	.....	.....	.....	.....	.....	.....	.....	.....	25
Charlestown Playground.....	14.000	113	107	127	110	109	159	230	218	286	498
Columbus Avenue Playground.....	5.000	326	453	459	333	394	306	664	836	1,622	1,156
Commonwealth Playground.....	8.100	.....	5	71	59	119	145	133	180	239	226
Cottage Street Playground.....	3.800	122	181	193	337	313	534	655	535	538	770
Dummy Field.....	* 6.400	.....	.....	.....	.....	.....	.....	.....	.....	29	83
Factory Hill Playground.....	* 5.200	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Fellows Street Playground.....	.850	535	814	1,122	1,184	1,251	259	84	476	579	2,670
First Street Playground.....	4.600	631	448	519	677	708	810	900	988	963	832
Forest Hills Playground.....	9.600	130	86	59	29	79	26	68	56	146	259
Franklin Field.....	77.000	72	91	92	112	95	87	110	144	184	251
Gibson Playground.....	5.800	258	301	279	261	279	280	258	302	403	610
John Winthrop Playground.....	1.600	.....	.....	.....	.....	.....	.....	.....	.....	16	667
Marcella Street Playground.....	5.100	272	315	608	480	593	652	646	596	866	926
Massachusetts Avenue Playground.....	3.300	.....	.....	.....	.....	.....	.....	.....	.....	65	363
Mt. Ida Playground.....	* 11.100	.....	.....	.....	.....	.....	.....	.....	.....	.....	147
Mystic Playground.....	2.300	286	352	497	422	630	294	544	823	959	1,049
Neponset Playground.....	18.000	76	80	75	77	87	67	75	72	97	74

Norfolk Street Playground.....	6.300	75	93	99	175	198	219	236	276	395	5
North Brighton Playground.....	14.000								17	108	458
Orient Heights Playground.....	5.200									52	182
Paris Street Playground.....	1.300									84	84
Parker Hill Playground.....	4.500									171	196
Parkinson Playground.....	4.500									125	319
Paul Gore Street Playground.....	.740										
Portsmouth Street Playground.....	4.300									122	100
Prince Street Playground.....	.400	2,042	2,257	2,607	2,511	2,930	400	928	623	1,808	4,817
Randolph Street Playground.....	2.800	455	725	609	887	1,193	707	923	831	1,626	1,452
Ripley Playground.....	.900										708
Rogers Park.....	6.900	48	167	220	246	132	228	286	309	216	310
Rosindale Playground.....	3.700	203	235	216	269	198	275	416	621	672	441
Rutherford Avenue Playground.....	* 1.100									10	71
Savin Hill Playground.....	6.900	194	160	328	269	292	374	465	401	426	339
Smith's Pond.....	* 20.100										3
Tyler Street Playground.....	.260									6	158
Ward 19 Playground.....	* 2.550										165
West Fifth Street Playground.....	.410							588	1,535	3,883	1,499
West Third Street Playground.....	.280							875	2,216	5,509	5,357
William Eustis Playground.....	4.900							209	620	795	941
Wood Playground.....	* 3.100										
Malloch's Wharf.....	* 1.150										23
Average.....	293.000										\$333

* Unimproved.

PARKS, PLAYGROUNDS AND ROADS.—Continued.

	Acres.	COST PER ACRE.									
		1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Arborway.....	36.000	\$217	\$269	\$300	\$363	\$359	\$224	\$211	\$214	\$204	\$176
Arnold Arboretum.....	* 223.000	26	25	33	31	18	15	14	16	19	22
Charlesbank.....	10.000	1,003	933	959	1,161	1,479	1,485	1,453	1,623	1,574	1,636
Charlestown Heights.....	6.100	307	417	489	579	605	619	542	562	539	576
Chestnut Hill Park.....	55.400	79	106	113	119	108	112	121	131	146	99
Columbia road.....	31.200	227	233	295	276	173	217	256	234	204	213
Commonwealth avenue.....	† 30.000	628	691	.....	.....	.....	.....	.....	.....	.....	.....
.....	112.700	.....	.....	553	376	463	507	328	359	809	613
Dorchester Park.....	26.000	44	51	69	67	79	58	82	100	169	122
Fens.....	115.000	145	120	169	170	143	121	256	145	150	209
Franklin Park.....	527.000	97	103	106	139	114	136	129	121	137	148
Governor's Island.....	73.000	.....	.....	.....	.....	.....	.....	.....	.....	21	65
Marine Park and Castle Island.....	78.200	111	175	174	231	227	223	234	200	222	247
Olmsted Park.....	180.000	117	129	150	166	137	143	148	137	235	137
Riverway.....	40.000	321	384	427	450	322	536	349	769	290	260
Savin Hill Park.....	8.300	.....	.....	.....	.....	.....	.....	35	137	164	169
Strandway.....	74.300	42	60	125	177	151	136	119	134	173	147
West Roxbury Way.....	† 150.000	3	7	7	21	12	20	48	46	23	21

Wood Island Park.....	55.600	121	143	159	184	179	207	202	184	277	238
Copp's Hill terraces.....	.600	823	647	776	1,498	1,250	990	1,210	1,067	1,312	919
Average.....	1,802.400										\$196
Adams square.....	.048										
Adams street.....	.016										\$2,896
Algonquin square.....	.040										1,919
Alvah Kittridge Park.....	.129										987
Belmont square.....	.689										560
Berners square.....	1.300					\$10	\$7	\$45	\$18	\$13	48
Berwick Park.....	.087										1,574
Blackstone square.....	2.410										398
Boston Common.....	48.400										643
Brighton square.....	.574										526
Bromley Park.....	.482										441
Camp Meigs.....	2.806										126
Carruth square.....	.017										6,022
Cedar square.....	.601										407
Central square.....	.925										520
Centre square.....	.074										612
City Hall grounds.....	.177										1,398

* Of this area only the roads and walks, 16.8 acres, are maintained by the city.

† At the end of 1905, 82.7 acres were added by the placing of that portion of Commonwealth avenue west of Brookline avenue and extending to the Newton city line under the care of the Park Department.

‡ Unimproved.

MAINTENANCE OF ROADS.	Square Yards.	COST PER SQUARE YARD.									
		1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Commonwealth avenue, Arlington street to Beacon street.	60,600	\$0 215	\$0 242	.....	\$0 218	.....	.....	.....	.....	.....	.....
Commonwealth avenue, Beacon street to Newton line.	203,700	.....	.....	.....	083	.....	.....	.....	.....	.....	.....
Commonwealth avenue, Arlington street to Newton line.	264,300	.....	.....	\$0 210	122	\$0 170	\$0 189	\$0 119	\$0 127	\$0 309	\$0 173
Fens, Riverway, Olmsted Park, Arborway, Columbia road and Marine Park.	372,800	105	092	120	120	083	089	101	139	086	068
Franklin Park and Arnold Arboretum.....	210,100	074	076	068	068	029	033	030	031	043	038
Average.....	847,200	\$0 105	\$0 101	\$0 135	\$0 107	\$0 097	\$0 107	\$0 089	\$0 108	\$0 145	\$0 093

The above table shows the cost of maintenance of roads for the last ten years, with the average cost per annum for the same period. This includes all labor, teaming and road repairs, including resurfacing, cleaning out of catch-basins, sweeping and oiling for the suppression of dust.

Location, Area and Equipment of Parks and Gardens, 1913-14.

PARKS AND GARDENS.	Area.	Location.	Equipment.
Adams square.....	2,068 sq. ft.	Junction of Adams and Granite streets.	
Adams street.....	.048 acre	Junction of Adams and Codman streets.	
Algonquin square.....	1,728 sq. ft.	Algonquin and Bradlee streets.	
Alvah Kittredge Park.....	.04 acre	Highland street and Highland avenue.	
Arborway.....	5,600 sq. ft.	Prince street to Franklin Park.	
Arnold Arboretum.....	.129 acre	South, Centre and Walter streets.	
Belmont square.....	36 acres	Webster, Sumner, Lamson and Seaver streets.	
Berners square.....	223 acres	Longwood avenue, Pilgrim road and Plymouth street.	
Berwick Park.....	.689 acre	Off Columbus avenue, near New York, New Haven & Hartford Railroad.	
Blackstone square.....	1,300 sq. ft.	Washington, West Brookline, West Newton streets and Shawmut avenue.	
Boston Common.....	105,100 sq. ft.	Park, Tremont, Boylston, Charles and Beacon streets.	
Brighton square.....	2,41 acres	Between Chestnut Hill avenue and Rockland street.	Ball ground and children's corner. Skating during the winter.
Bromley park.....	2,096,020 sq. ft.	From Albert street to Bickford street.	
Camp Meigs.....	25,035 sq. ft.	Clifford, Stanley and Irving streets.	
Carruth square.....	.574 acre	South Conway, South Fairview and Robert streets.	
Cedar square.....	20,975 sq. ft.	Cedar street, between Juniper and Thornton streets.	
Central square.....	124,500 sq. ft.	Meridian and Border streets.	
Centre square.....	2,806 acres	Centre and Perkins streets.	
	750 sq. ft.		
	.017 acre		
	26,163 sq. ft.		
	.601 acre		
	40,310 sq. ft.		
	.925 acre		
	3,200 sq. ft.		
	.074 acre		

Location, Area and Equipment of Parks and Gardens, 1913-14. — *Continued.*

PARKS AND GARDENS.	Area.	Location.	Equipment.
Charlesbank.....	10 acres	Charles street, from Cambridge street to Leverett street.	Three and one-half acres playground area. Outdoor gymnasium, basket ball, children's playground, skating, shower baths, floating baths and women's indoor gymnasium and boating. One acre children's playground.
Charlestown Heights.....	6.1 acres	Bunker Hill and Medford streets.	
Chestnut Hill Park (reservoir and adjacent lands, 160.65 acres).	55.4 acres	Beacon street and Commonwealth avenue, Brighton.	Four acres playground area. Three ball grounds and tennis. One Rugby football ground and one Soccer football ground.
City Hall Grounds.....	7,700 sq. ft. .177 acre	School street.	
City square.....	8,739 sq. ft. 201 acre	Head of Bow and Main streets.	
Columbia road.....	31.2 acres	Franklin Park to Marine Park.	
Public square.....	2,250 sq. ft. .0516 acre	Junction of Columbus and Warren avenues.	
Commonwealth avenue.....	112.7 acres 5,000 sq. ft.	Arlington street to Newton line.	
Concord square.....	.115 acre	Between Tremont street and Columbus avenue.	
Copley square.....	28,399 sq. ft. .652 acre	Between Huntington avenue, Boylston and Dartmouth streets.	
Copp's Hill Terraces.....	.6 acre	Commercial and Charter streets.....	Mothers' and children's shelter.
Dorchester square.....	56,200 sq. ft. 1.29 acres	Between Church, Adams and Winter streets, Meeting House Hill.	
Dorchester Park.....	26 acres	Dorchester avenue and Richmond street.....	One acre playground area. One ball ground. One Soccer football ground, skating and children's corner.
Drohan square.....	10,241 sq. ft. 235 acre	Edison green, between Pond street and Dorchester avenue.	
Eaton square.....	13,280 sq. ft. .305 acre	Between Church, Adams and Bowdoin streets.	
Elm Hill Park.....	6,920 sq. ft. .159 acre	Off 550 Warren street, between Intervale and Gaston streets.	
Essex square.....	930 sq. ft.	Between Essex and Lyndeboro' streets.	
Fens.....	021 acre 115 acres	Beacon street to Brookline avenue.....	Five acres of playground area. Two ball grounds. One Soccer football ground and children's corner.

Fern square.....	1,900 sq. ft.	Between Franklin and Fern streets.	
Florida street.....	.044 acre	Between King and Ashmont streets. (Seven inclosures.)	
Fort Hill square.....	24,193 sq. ft.	High street, near Oliver street.	
Francis Street Circle.....	.555 acre	Junction Huntington avenue, Tremont and Francis streets.	
Franklin Park.....	29,480 sq. ft.	Seaver street to Morton street and Blue Hill avenue to Forest Hills street.	Thirty-six acres playground area. Twelve ball grounds. Four Soccer football grounds, tennis, golf, tobogganing, skating, shower baths and Zoological Garden.
	1,662 sq. ft.		
	.677 acre		
	038 acre		
	527 acres		
Franklin square.....	105,205 sq. ft.	Washington, East Brookline, East Newton and James streets.	Camping sites.
Governor's Island.....	2.41 acres	Boston Harbor.....	
Greenwood square.....	73 acres	Junction Thatcher street and Central avenue.	
Harold square.....	220 sq. ft.	Abbotsford, Crawford and Harold streets.	
Hayes square.....	.005 acre	Bunker Hill, Vine and Moulton streets.	
Heath square.....	966 sq. ft.	Old Heath, New Heath and Parker streets.	
Highland Park.....	.022 acre	Fort avenue.	
Horatio Harris Park.....	4,484 sq. ft.	Walnut avenue, between Munroe and Townsend streets.	
Independence square.....	.103 acre	Broadway, Second, M and N streets.	
Jackson square.....	2,419 sq. ft.	Chestnut Hill avenue, Union and Winship streets.	
Lincoln square.....	158,421 sq. ft.	Emerson, Fourth and M streets.	
Linwood Park.....	3,637 acres	Centre and Linwood streets.	
Longwood Park.....	116,000 sq. ft.	Deaconess road, Brookline avenue, Pilgrim road and Austin street.	
Madison Park.....	2,663 acres	Sterling, Marble, Warwick and Westminster streets.	
Magnolia street.....	279,218 sq. ft.	Junction Wayland, Bird and Magnolia streets.	
Marine Park and Castle Island (land, 78.2; flats, 83.2).	6.41 acres	Farragut road, City Point.....	Beach bathing, boating, Aquarium, tennis and swings.
Massachusetts avenue.....	4,300 sq. ft.	Between Albany street and Columbus avenue (four sections).	
	.099 acre		
	9,510 sq. ft.		
	3,218 acre		
	.083 acre		
	21,000 sq. ft.		
	.482 acre		
	122,191 sq. ft.		
	2,805 acres		
	3,605 sq. ft.		
	.083 acre		
	161.40 acres		
	106,500 sq. ft.		
	2.446 acres		

Location, Area and Equipment of Parks and Gardens, 1913-14.—*Continued.*

PARKS AND GARDENS.	Area.	Location.	Equipment.
Maverick square.....	4,396 sq. ft. .101 acre	Sumner and Maverick streets.	
Girls' Latin School Bath.			
Milton square.....	220 sq. ft. .005 acre	Junction of Milton avenue and Highland street.	
Mt. Bowdoin Green.....	25,170 sq. ft. .578 acre	Top of Mt. Bowdoin, Bowdoin avenue.	
Oak square.....	9,796 sq. ft. .22 acre	Washington and Faneuil streets.	
Oakview terrace.....	5,287 sq. ft. .121 acre	Off 426 Centre street.	
Olmsted Park (in Brookline, 18 acres).....	180 acres	Huntington avenue and Brookline line to Prince street.	Three acres playground area. Two ball grounds. One Rugby and two Soccer football grounds, tennis, boating, fishing and skating on Jamaica Pond. Children's wading pool and shelter.
Orchard Park.....	104,492 sq. ft. 2,399 acres	Chadwick, Orchard Park and Yeoman streets...	
Park square.....	2,867 sq. ft. .066 acre	Columbus avenue, Eliot and Pleasant streets.	
Peabody square.....	1,963½ sq. ft. .045 acre	Junction Dorchester avenue and Ashmont street.	
Prescott square.....	12,284 sq. ft. .282 acre	Trenton, Eagle and Prescott streets.	
Public Garden.....	1,056,300 sq. ft. 24.25 acres	Charles, Boylston, Arlington and Beacon streets.	
Putnam square.....	11,628 sq. ft. .267 acre	Putnam, White and Trenton streets.	
Richardson square.....	45,982 sq. ft. 1.056 acres	Between Pond and Cottage streets.	
Riverway (in Brookline, 16.5 acres).....	40 acres	Brookline avenue and Brookline line to Hunting-ton avenue.	Outdoor floral displays and boating during summer months, skating during the winter.
Rutland square.....	7,400 sq. ft. .17 acre	Between Tremont street and Columbus avenue.	
St. Stephen square.....	100 sq. ft. .002 acre	Corner St. Stephen and Batavia streets.	
Savin Hill Park.....	8.26 acres	Grampian way.....	Tennis.
Seaver street.....	2,500 sq. ft. .057 acre	Seaver street and Blue Hill avenue.	

Soldiers' Monument lot.....	5,870 sq. ft. 135 acre	South and Centre streets.
Sparhawk square.....	7,449 sq. ft. 171 acre	Junction Cambridge, Brighton, Murdock and Sparhawk streets.
Spaulding square.....	6,263 sq. ft. 143 acre	Junction Freeport street and Neponset avenue.
Strandway	74.31 acres	Columbia road railroad bridge to Marine Park.
Sullivan square.....	56,428 sq. ft. 1,295 acres	Main, Cambridge, Sever and Gardner streets.
Thomas Park (Telegraph Hill).....	190,000 sq. ft. 4,362 acres	Thomas Park.
Tremlett square.....	7,107 sq. ft. 163 acre	Tremlett street, between Hooper and Waldeck streets.
Trinity Triangle.....	5,380 sq. ft. 123 acre	Between Huntington avenue, Trinity place and St. James avenue.
Union Park.....	16,000 sq. ft. 367 acre	Between Tremont street and Shawmut avenue.
Vose square.....	220 sq. ft. 5,005 acre	Beacon street, Metropolitan and Vose avenues.
Walnut Park.....	5,736 sq. ft. 132 acre	Between Washington street and Walnut Park.
Waltham square.....	3,000 sq. ft. 689 acre	Harrison avenue, between Union Park and Waltham streets.
Warren square.....	1,380 sq. ft. 312 acre	Warren street, St. James and Regent streets.
Washington Park.....	396,125 sq. ft. 9,094 acres	Dale, Bainbridge and Paulding streets.
Webster square.....	220 sq. ft. 5,005 acre	Junction Webster street and Central avenue.
Wellesley Park.....	28,971 sq. ft. 665 acre	Wellesley Park, between Melville avenue and Park street.
West Roxbury Way.....	150 acres	Walter to Centre streets, Centre street to Washington street, Bellevue Hill.
Williams square.....	700 sq. ft. 16 acre	Junction Williams avenue and Prospect street.
Winthrop square.....	38,450 sq. ft. 883 acre	Winthrop, Common and Adams streets.
Wolcott square.....	220 sq. ft. 5,005 acre	Hyde Park avenue, Milton and Prescott streets.

Twenty-three and one-half acres playground area.
Five ball grounds. One Rugby and five Soccer
football grounds, basket ball, tennis, skating,
shower baths and children's corner. Beach
bathing during summer at L Street and
McKenzie Beaches.

Location, Area and Equipment of Parks and Gardens, 1913-14.—*Concluded.*

PARKS AND GARDENS.	Area.	Location.	Equipment.
Wood Island Park.....	55.6 acres	Neptune road, from Bennington street.....	Ten acres playground area. Three ball grounds. One Rugby and three Soccer football grounds. Outdoor gymnasium, cricket, tennis, skating, shower baths and beach bathing.
Worcester square.....	16,000 sq. ft. .367 acre	Between Washington street and Harrison avenue. Massachusetts avenue and Shirley street, adjoining location of New York, New Haven & Hartford Railroad. Between Massachusetts avenue and East Cottage street, Dorchester. Corner Cambridge, Lincoln and Mansfield streets, Brighton.	
Storage grounds.....	74,279 sq. ft. 1.705 acres		
Greenhouse and nursery grounds.....	102,531 sq. ft. 2.354 acres		
Public land.....	32,346 sq. ft. .74 acre		

Location, Area and Equipment of Playgrounds and Gymnasias, 1913-14.

NAME.	Area, Acres.	Location.	Equipment.
Ashmont Playground	2.20	Brent street, near Talbot avenue, Dorchester district.	Two ball grounds. Two Soccer football grounds, tennis, skating and children's corner.
Billings Field	11.00	La Grange and Bellevue streets, near Centre street, West Roxbury district.	Four ball grounds. One Rugby and two Soccer football grounds, tennis, skating and shower baths.
Carolina Avenue Playground	3.10	Carolina avenue, Jamaica Plain.	One ball ground. One Soccer football ground and children's playground.
Charlestown Playground (land, 14 acres; flats, 4 acres).	18.00	Main and Alford streets, Charlestown district.	Four ball grounds. One Rugby and three Soccer football grounds, two handball courts, basket ball skating, quirt rinks and running track.
Columbus Avenue Playground	5.00	Columbus avenue and Camden street, Roxbury district.	Two ball grounds. One Rugby and three Soccer football grounds, children's corner, boys' athletic field, skating and shower baths. Board running track in winter.
Commonwealth Playground	8.07	C, D and Cypher streets and Mt. Washington avenue, South Boston district.	Six ball grounds. One Rugby and three Soccer football grounds, skating and indoor gymnasium.
Cottage Street Playground	3.85	Cottage street, near Maverick street, East Boston district.	Two ball grounds. Three Soccer football grounds, children's corner and skating.
Dummy Field	6.40	Everett street, Allston district.	Three ball grounds. One Rugby and two Soccer football grounds.
Factory Hill Playground	5.20	Town street, near Sunnyside street, Hyde Park district.	Children's playground, basket ball, two handball courts, coasting incline during winter.
Fellows Street Playground	.85	Fellows and Hunneman streets, Roxbury district.	Three ball grounds. One Rugby and two Soccer football grounds, outdoor gymnasium, basket ball, skating, shower baths and children's corner.
First Street Playground	4.60	First and M streets, South Boston district.	Four ball grounds. One Rugby and three Soccer football grounds, basket ball, shower baths and children's corner.
Forest Hills Playground	9.60	Washington and Florence streets, Roslindale, West Roxbury district.	Sixty acres playground area, eighteen ball grounds. Two Rugby and three Soccer football grounds, tennis, cricket, bowling, curling, skating, running track, speedway for horses, shower baths and children's corner.
Franklin Field	77.00	Talbot and Blue Hill avenues, Dorchester district.	

Location, Area and Equipment of Playgrounds and Gymnasias, 1913-14.—*Concluded.*

NAME.	Area, Acres.	Location.	Equipment.
Gibson Playground.....	5.80	Dorchester avenue, Geneva avenue and Park street, Dorchester district.	Two ball grounds. One Rugby and two Soccer foot- ball grounds, tennis, skating, shower baths and children's corner.
John Winthrop Playground.....	1.57	Dacia and Danube streets.....	One ball ground. One Soccer football ground, chil- dren's corner and coasting incline during winter.
Marcella Street Playground.....	5.10	Richie, Highland and Marcella streets, Roxbury district.	Three ball grounds. One Rugby and two Soccer football grounds, basket ball, shower baths and children's corner.
Massachusetts Avenue Playground.....	2.76	Massachusetts avenue, near Edward Everett square, Dorchester district.	One Soccer football ground and children's corner.
Mt. Ida Playground (Roman Park).....	11.07	Top of Mt. Ida, Meeting House Hill, Dorchester district.	One ball ground.
Mystic Playground.....	2.30	Chelsea street and Mystic river.....	One Soccer football ground and children's corner.
Neponset Playground.....	18.00	Neponset avenue, Dorchester district.....	One ball ground. One Soccer football ground, skat- ing and children's corner.
Norfolk Street Playground.....	6.35	Norfolk street, Mattapan, Dorchester district.....	Two ball grounds. One Rugby and two Soccer foot- ball grounds, skating and children's corner.
North Brighton Playground.....	14.00	Western avenue, near North Harvard street, All- ston, Brighton district.	Football field. Four ball grounds. One Rugby and two Soccer foot- ball grounds, basket ball, skating, shower baths and children's corner.
Orient Heights Playground.....	5.24	Santoga and Boardman streets, Orient Heights, East Boston district.	Two ball grounds. One Soccer football ground and one Soccer football ground.
Paris Street Playground.....	1.27	Paris street, East Boston.	Children's corner.
Parker Hill Playground.....	4.50	Reservoir lot, top of Parker Hill, Roxbury.....	One Soccer football ground and children's corner.
Parkinson Playground.....	4.50	Forest Hills street and Williams street, Jamaica Plain, West Roxbury district.	Two ball grounds. One Soccer football ground, one Rugby football ground, children's corner.
Portsmouth Street Playground.....	4.29	Portsmouth street, Brighton.....	Children's playground and basket ball, coasting incline during winter.
Prince Street Playground.....	.40	Prince and North Bennet streets, city proper.....	Two ball grounds. One Rugby and two Soccer football grounds, basket ball, skating, shower baths and children's corner.
Randolph Street Playground.....	2.80	Albany and Randolph streets, city proper.....	Children's playground.
Ripley Playground.....	.86	Trescott street, near Harvard street, Dorchester district.	

Rogers Park.....	6.90	Lake and Foster streets, Brighton district.....	Four acres playground area. Two ball grounds. One Rugby and two Soccer football grounds, skating and children's corner.
Roslindale Playground.....	3.80	South, Robert and South Walter streets, Roslindale, West Roxbury district.	One ball ground. One Rugby and two Soccer football grounds, tennis, skating and children's corner.
Rutherford Avenue Playground.....	1.10	Rutherford avenue, Washington and Union streets, Charlestown district.	
Savin Hill Playground (8.35 acres upland; 24.35 acres flats.)	32.70	Springdale and Denny streets, Savin Hill, Dorchester district.	Three ball grounds. One Rugby and two Soccer football grounds, basket ball, skating and beach bathing.
Smith's Pond.....	20.08	Stony Brook Reservation, Hyde Park.....	Children's corner and shelter.
Tyler Street Playground.....	.26	Tyler street, city proper.....	Skating in winter.
Ward 19 Playground.....	2.55	Philips street, near Tremont street, Roxbury district.	Children's playground.
West Fifth Street Playground.....	.41	West Fifth street, between D and E streets, South Boston district.	Children's playground.
West Third Street Playground.....	.28	West Third street, corner of B street, South Boston district.	Three ball grounds. One Rugby and two Soccer football grounds, skating, shower baths and children's corner.
William Eustis Playground.....	4.88	Norfolk avenue and Proctor street, Roxbury district.	Indoor gymnasium and shower baths.
Wood Playground.....	3.10	Near Hallett street, Neponset, Dorchester district.	Indoor gymnasium and shower baths.
Ward 3 Gymnasium.....	.....	Bunker Hill and Lexington streets, Charlestown district.	Indoor gymnasium and shower baths.
Ward 7 Gymnasium.....	.....	Tyler street, city proper.....	Indoor gymnasium and shower baths.
Ward 8 Gymnasium.....	.....	Blossom street, city proper.....	Indoor gymnasium and shower baths.
Ward 9 Gymnasium.....	.....	Harrison avenue and Plympton street, city proper, Columbia road, near Upham's Corner, Dorchester district.	Indoor gymnasium, shower baths and swimming pool, 40 feet by 33 feet.
Ward 16 Gymnasium.....	.....	D street, at Commonwealth Park, South Boston district.	Indoor gymnasium and shower baths.
D Street Gymnasium.....	.....	Paris street, East Boston district.....	Indoor gymnasium, shower baths and basket ball courts.
East Boston Gymnasium.....	.....	Cabot street, near Whittier street, Roxbury district.	Indoor gymnasium, shower baths and swimming pool, 75 feet by 30 feet.
Cabot Street Gymnasium.....	.....	South street, corner Sedgwick street, Jamaica Plain district.	Indoor gymnasium, shower baths and swimming pool, 75 feet by 25 feet.
Curtis Hall Gymnasium.....	.....	North Bennet street at playground, city proper... Freeport street, near foot of Park street, Dorchester district.	Indoor gymnasium and shower baths.
North Bennet Street Gymnasium.....	.....	Northeast side Paul Gore street, between Centre street and Chestnut avenue.	
Malloch's Wharf (1.15 acres upland; 2.54 acres flats.)	3.69		
Paul Gore Street Playground.....	.74		

Location, Area and Equipment of Baths and Beaches, 1913-14.

NAME.	Area, Acres.	Location.	Equipment.
Cabot Street Bath.....		In Cabot Street Bath House Building, Roxbury district.	Shower baths and swimming pool, 75 feet by 30 feet.
Copley School Bath.....		Bartlett street, between Pearl and School streets, Charlestown district.	Shower baths.
Curtis Hall Bath.....		In Curtis Hall, Jamaica Plain district.	Shower baths and swimming pool, 75 feet by 25 feet.
Dewey Beach Bath.....	4.30	Medford street, at Charlestown Heights, Charlestown district.	Beach bathing during summer months.
Dover Street Bath.....		Dover street, near Harrison avenue, city proper.	Shower baths.
Freeport Street Bath.....		Freeport street, Dorchester district.	Beach bathing during summer months.
Girls' Latin School Bath.....		Huntington avenue, near Fens, Roxbury district.	Shower baths.
L Street Bath.....		On Strandway, Dorchester Bay, South Boston.	Beach bathing during entire year.
McKenzie Beach Bath.....		On Strandway, at head of Dorchester Bay, South Boston.	Beach bathing during summer months.
North Bennet Street Bath.....		In North Bennet Street Gymnasium.	Shower baths.
North End Beach Bath (land, 3.70 acres; flats, 3 acres).....	6.70	Commercial street, at Charles river.	Beach bathing during the summer months for men, women and children.
Spring Street Bath.....		Spring street, West Roxbury, at Charles river.	River bathing during the summer months for men and boys.
Tenean Beach Bath.....		Tenean street, Dorchester district.	Beach bathing during summer months.
Wood Island Bath.....		At Wood Island Park.	Beach bathing during summer months.
Border Street Floating Bath.....		Border street, East Boston.	Two floating bath houses for men and women.
Charlesbank Floating Bath.....		Charles River Basin at Charlesbank.	Two floating bath houses for men and women.
Dover Street Floating Bath.....		Dover street, at Fort Point Channel, city proper.	Two floating bath houses for men and women.
East Boston Wharf.....		Condon street, corner of Meridian street, East Boston district.	Storage basin and repair shop.
Fort Point Channel Floating Bath.....		Northern avenue, city proper.	One floating bath house for men only.
Jeffries Point Floating Bath.....		Jeffries Point, East Boston district.	One floating bath house for men and women.
Mystic Bridge Floating Bath.....		Chelsea street, at Mystic river, Charlestown district.	One floating bath house for men and women.
Warren Bridge Floating Bath.....		Warren avenue, at Charles river, Charlestown district.	Two floating bath houses for men and women.
Dover Street Laundry. North End Park Laundry.			

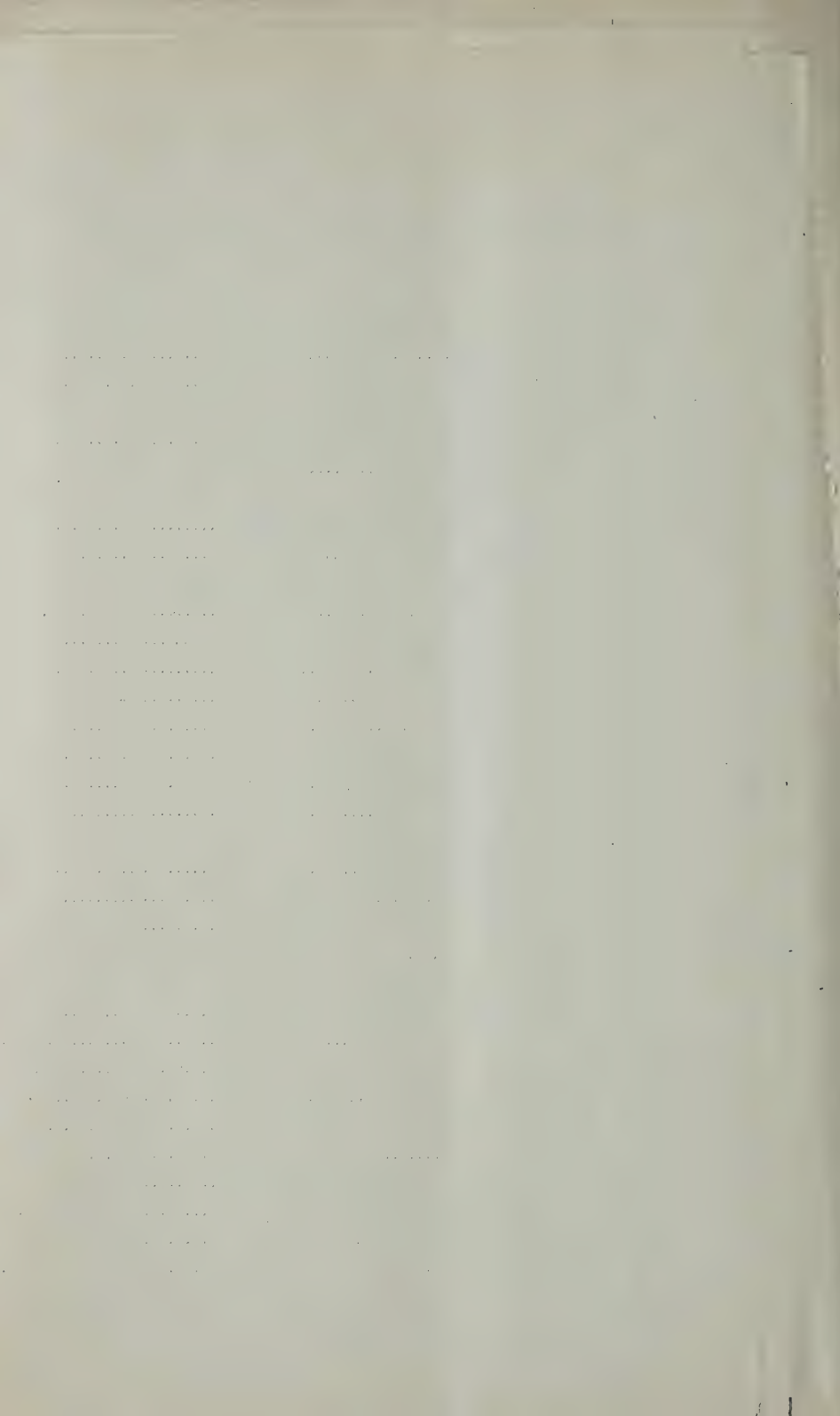
GENERAL EXHIBIT OF APPROPRIATIONS FOR LAND AND CONSTRUCTION, 1913-14.

Object of Appropriation.	Balance June 30, 1913.	Balance carried over from 1912-13.	Open bonded in 1913-14.	Appropriations 1913-14.	Transfers to.	Transfers from.	Total Credits.	Expenditures for 1913-14.	Balance Unexpended.
Public park land	\$80 75						\$80 75		\$80 75
Park House, Chestnutmont	4,859 37						4,859 37	4,859 37	
Park House, Tower Beach	3,906 58						3,906 58	3,906 58	
Park House, South End	3,814 23						3,814 23		3,814 23
Park House, Union Heights	5,000 00						5,000 00		5,000 00
Park House, Ward Island Beach			\$16,000 00		\$500 00		16,500 00	13,573 40	2,926 60
Booster Cannon and three cranes, dirigible to ship, etc.					50,000 00		50,000 00	47,538 84	2,461 16
Booster Cannon, east of landfill					4,000 00		4,000 00		4,000 00
Castle Island and Marine Park improvements	855 09						855 09	855 09	
Chapelton West Bridge, reconstructed					8,000 00		8,000 00	5,664 88	2,335 12
Commissioner's Building and Police Station, improvements	29,192 90	\$3,910 00					33,102 90	13,296 33	9,796 57
Commissioner's Playground	238 73						238 73	238 73	
Commissioner's grounds, between Atlantic and Commercial streets					25,000 00		25,000 00	12,580 60	12,419 40
Commissioner's Park, building, special grounds and grounds	1,470 34						1,470 34		1,470 34
Convention stations, etc.	14,331 44					\$5,067 88	9,313 56	9,313 56	
Convention station, City square, and at or near Park square	16,644 50						16,644 50	486 81	16,157 69
Crocker Museum, grounds	500 00						500 00	250 00	250 00
Crocker Museum, improvements	97 73						97 73		97 73
Copp's Hill Playground, shelter	27,758 56						27,758 56	10,479 27	17,279 29
Dorchester Park, ball field, etc.					2,000 00		2,000 00	2,000 00	
Dorchester Park, water supply and fountains	322 78						322 78	322 78	
Falmouth Street Playground, sanitary building	1,028 54						1,028 54	61 12	967 42
Falmouth Street	1,092 44				18,000 00		19,172 50	3,097 40	10,075 10
Forest Hills Playground, locker building	1,127 44						1,127 44	1,127 44	
Forest Hills, golf links					10,000 00		10,000 00		10,000 00
Governor's Island, improvements	2,736 33						2,736 33	2,736 33	
Governor's, New Boston	14,016 32						14,016 32		14,016 32
Gymnasium, Ward Building, Ward 5	22,905 85				15,000 00		37,905 85		37,905 85
High Fort Observatory	898 15						898 15	898 15	
Highland Park, additional land			10,000 00				10,000 00	10,000 00	
Highland Park, improvements	3,000 00						3,000 00		3,000 00
Horticultural Building					28,000 00		28,000 00	550 00	27,450 00
Improvements of small parks and squares					10,000 00		10,000 00	3,418 94	6,581 06
Jamaica Pond, wharf and boat landing	9,883 02						9,883 02	9,883 02	
John Winthrop Playground, improvements	2,119 14						2,119 14	2,119 14	
Marcella Street Playground, gymnasium apparatus and	1,809 41						1,809 41	1,809 41	
Myster Playground, sea wall and fence	4,046 25						4,046 25	4,046 25	
Nashua Street	2,000 00						2,000 00		2,000 00
Nepesmet Playground, filling and grading	240 44						240 44	240 44	
Nepesmet					25,000 00		25,000 00	9,268 53	15,731 47
Nepesmet, Ward, reserved location					6,000 00		6,000 00	6,000 00	
Playground accommodations, Mattapan district	25,000 00						25,000 00	23,265 46	1,734 54
Playground accommodations, Ward 2	5,892 62				630 64		6,523 26	6,523 26	
Playground accommodations, Ward 19	99,950 00						99,950 00	69,120 00	30,830 00
Playgrounds, completion of			100,000 00				100,000 00	42,816 52	57,183 48
Playgrounds, improvements	11,482 15				7,000 00		18,482 15	15,590 10	2,892 05
Playground, Apple Island			25,000 00				25,000 00		25,000 00
Playground, Mt. Ida	84,083 50						84,083 50	69,541 70	14,541 80
Playground, Ward 5	79,625 00						79,625 00	70,231 07	9,393 93
Playground, "Pied"	27,016 46						27,016 46	21,812 00	5,204 46
Priest Street Playground, sanitary building	5,000 00						5,000 00	4,141 04	858 96
Priest Street, filling and grading					1,000 00		1,000 00	28 00	972 00
Refectory Building, Franklin Park, alterations of					5,000 00		5,000 00	555 30	4,444 70
Riverside Playground, additional land					1,300 00		1,300 00	1,300 00	
Riverside Playground, sanitary	509 93						509 93	509 93	
Savin Hill Park, improvements	210 98						210 98	210 98	
Savin Hill Beach, additional land			7,500 00		9,991 00		17,491 00		17,491 00
Savin Hill Playground, improvements	9,991 00					9,991 00			
South End	3,322 78						3,322 78	3,322 78	
South End	296 84						296 84	296 84	
South End, building					2,000 00		2,000 00		2,000 00
South End, grounds			10,000 00				10,000 00		10,000 00
South End, water and sewerage	151,485 94	296 84			68,668 17		151,485 94	118,116 51	33,369 43
	\$601,096 92	\$4,175 50	\$168,500 00		\$297,989 81	\$15,058 88	\$1,055,775 35	\$628,033 90	\$427,741 45

EXPENDITURES ON ACCOUNT OF LAND AND CONSTRUCTION FROM FEBRUARY 1, 1913, TO JANUARY 31, 1914.

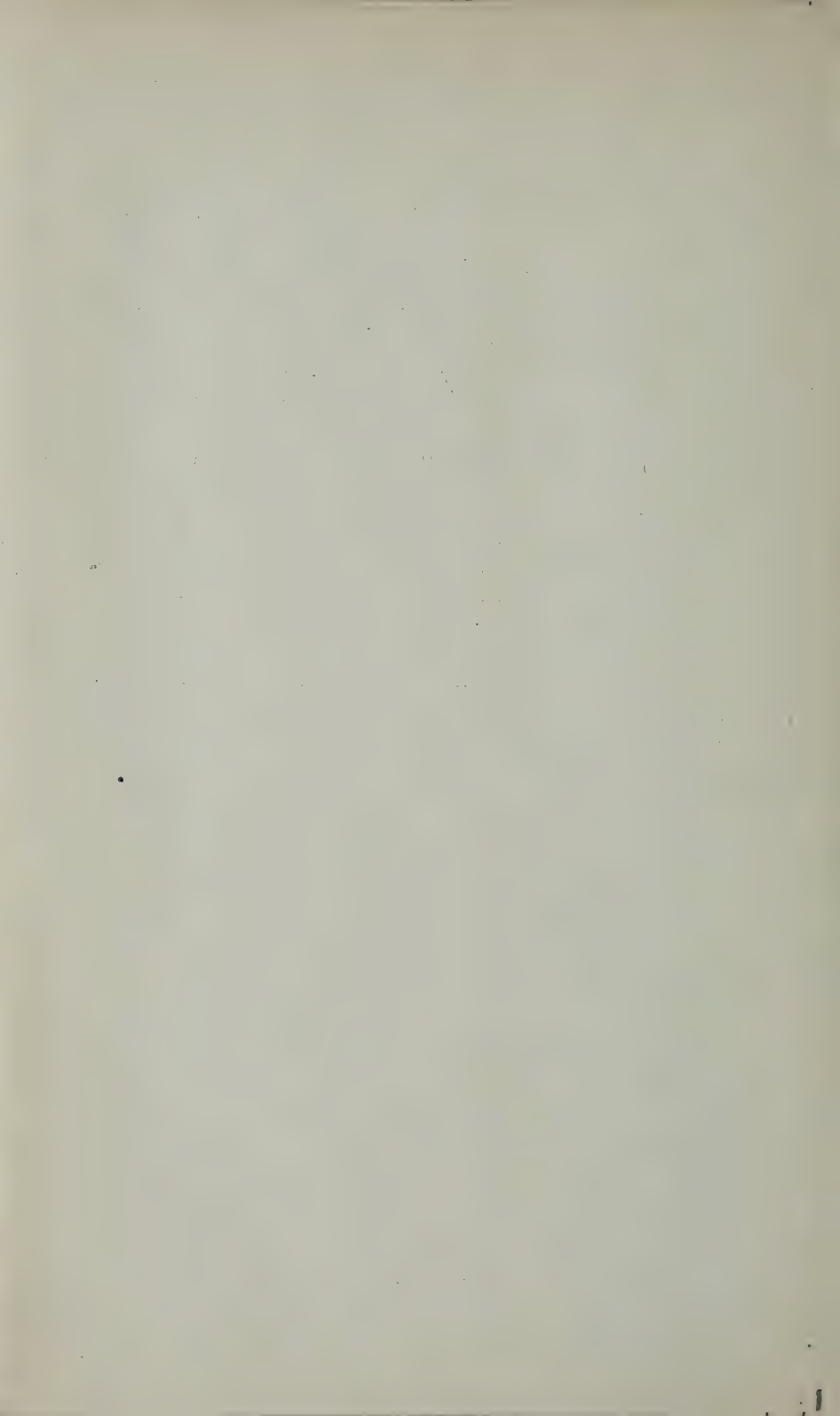
	Land.	Filling and Grading.	Drainage, Water Supply and Fountains.	Cages, Shelter and Buildings.	Planting.	Walks and Seats.	Fences, Gymnasium Apparatus and Flagpole.	Walks.	Soil Work.	Landscape Architect and Expert Advice.	Grounds.	Purchase of Fish, Animals, Etc.	Monuments and Gateways.	Pier Head and Wharves.	Bridges.	Pumping Plant.	Boat Service.	BUILDINGS.		Electric Lights.	Tudor Bequest.	Street Trees.	Totals.	Grand Total.	
																		Alterations.	Furnishings.						
Bath House, Charlestown *			\$125 00	\$535 65						\$740 00										\$3,488 72				\$4,889 37	
Bath House, Dewey Beach				3,906 58								3,906 58												3,906 58	
Bath House, Wood Island Park Beach				13,573 40																				13,573 40	
Boston Common and Public Garden, irrigation system		\$37 64	5 00	1 30		\$11,281 69	\$131 50		\$34,248 77	795 98	\$1,036 96										\$296 84			47,835 68	
Castle Island, Improvements														\$351 01										351 01	
Charlesgate West Bridge, restoration of															\$5,664 88									5,664 88	
Charlestown Heights and Dewey Beach, improvements				13,289 33		7 00																		13,296 33	
Charlestown Playground		12 50									226 23													238 73	
Commonwealth avenue, between Arlington and Dartmouth streets			2,623 02						9,957 58															12,580 60	
Convenience stations, etc.			3,023 83								1,348 55			\$4,941 18										9,313 56	
Convenience station at City square and at or near Park square											486 81													486 81	
Copley square, plans											250 00													250 00	
Copp's Hill Playground, shelter				10,479 27																				10,479 27	
Dorchester Park, ball field		2,000 00																						2,000 00	
Dorchester Park, water supply and fountain		22 00	300 78																					322 78	
Fellows Street Playground, sanitary building				61 12																				61 12	
Fens, improvements		1,404 06				682 48				86 76					200 20	\$663 00								3,097 40	
Forest Hills Playground, locker building		139 09		791 53	\$47 38		149 44																	1,127 44	
Governor's Island, improvements		172 07		34 83		2,232 65											\$296 78							2,736 33	
High Fort Observatory													898 15											898 15	
Highland Park, additional land	\$10,000 00																							10,000 00	
Horticultural Building										550 00														550 00	
Jamaica Pond, shelter and boat landing				9,883 02																				9,883 02	
John Winthrop Playground, improvements		6 62	212 00		463 68		1,436 84																	2,119 14	
Manetta Street Playground				179 65			1,629 76																	1,809 41	
Mystic Playground							4,046 25																	4,046 25	
Neponset Playground		240 44																						240 44	
Orchard Park, improvements		4,233 10	703 02	3,610 65		567 77	153 99																	9,268 53	
Parkman House																			\$3,800 00	2,200 00				6,000 00	
Playground accommodations, Mattapan district	22,011 33	1,237 38		16 75																				23,265 46	
Playground accommodations, Ward 2	6,523 26																							6,523 26	
Playground accommodations, Ward 19	69,120 00																							69,120 00	
Playground, Mt. Ida section	69,541 70																							69,541 70	
Playground, Ward 5	70,206 07									25 00														70,231 07	
Playground, Ward 7	11,426 09	17 40		9,599 63	1 37		102 95			663 90														21,812 00	
Prince Street Playground, sanitary building				4,141 04																				4,141 04	
Public landing, Freeport street														28 00										28 00	
Refectory Building, Franklin Park, alterations of																		555 30						555 30	
Roslindale Playground, additional land	1,300 00																							1,300 00	
Roslindale Playground, sanitary				494 93			15 00																	509 93	
Savin Hill Park, improvements					210 98																			210 98	
Street trees																								3,322 78	
Zoological Garden	1,790 57	7,243 34	58,127 89	2,331 73	8,226 75	6,230 72	\$3,218 07			3,173 99		\$5,816 01	473 79							\$1,431 82				98,064 68	
Marine Park and Aquarium		133 08		19,371 61								680 22		368 00										20,532 91	
Improvements of small parks and squares:																								\$566,208 34	
Blackstone square						339 41																		\$339 41	
Columbus square						232 32																		232 32	
Common square							1 13																	1 13	
Fort Hill square						292 59																		292 59	
Madison square						788 32																		788 32	
Franklin square						429 45																		429 45	
Massachusetts avenue						543 83																		543 83	
Oak square						597 55																		597 55	
Orchard Park							1 14																	1 14	
Rutland square							1 13																	1 13	
Washington Park						6 00																		6 00	
Worcester square						186 07																		186 07	
Playgrounds, completion of:																								3,418 94	
Carolina Avenue Playground	1,201 81	106 28	42 46				595 63			26 60														\$1,972 78	
John Winthrop Playground	449 65	23 07			195 90	37 00	471 61																	1,177 23	
Mt. Ida Playground	1,250 16		206 50							252 62														1,709 28	
Norfolk Street Playground	11,293 18	10 48	10,517 11				10 51	21 00																21,852 28	
Paris Street Playground	168 59	284 79	106 20				4,362 14			66 78														4,988 50	
Portsmouth Street Playground	827 40				3,165 81		30 30			24 30														4,047 87	
Rutherford Avenue Playground	3,045 40	30 24	3,704 81				241 43			46 70														7,068 58	
Playground Improvements:																								42,816 52	
Columbus Avenue Playground							1,031 30																	\$1,031 30	
Franklin Field Playground	6,321 95	16 77	1,018 50	329 75				22 50																7,709 47	
Massachusetts Avenue Playground	64 87				14 50		29 75																	109 12	
Mystic Playground	1,886 61	178 40					1,050 23			108 89														3,224 13	
Norfolk Street Playground																									

* Money expended by Building Department.



EXPENDITURES ON ACCOUNT OF MAINTENANCE FROM FEBRUARY 1, 1913, TO JANUARY 31, 1914.

PLAYGROUNDS AND GYMNASIA.	Cleaning, Patching and Oiling.	Bridle Path and Walks.	Grounds.	Moth Suppression.	Buildings.	CONSTRUCTION AND IMPROVEMENTS.					Animals, Fish, Sheep and Water Powl.	Sitting and Other Sports.	Men's Gymnasium.	Women's and Children's Gymnasium.	Rental.	Architect's Commission.	General Expense.	Totals.
						Grading Roads, Paving and Fencing.	Drainage and Water Supply.	Building Walls, Fences and Seats.	Building Gymnasium Apparatus.	Buildings.								
Ashmont Playground.....		\$5 91	\$864 93		\$670 00							\$187 36		\$32 80			\$375 42	\$2,136 51
Billings Field Playground.....		62 39	1,288 55	\$26 85	764 25	\$562 21	\$328 02		\$60 37			205 77					701 50	3,999 91
Carolina Avenue Playground.....			42 50			47 53			56 83			3 00					32 80	182 66
Charlestown Playground.....		66 72	2,462 41		1,256 70	546 43						1,476 78		397 32			1,322 86	7,529 22
Columbus Avenue Playground.....		12 76	1,740 99		1,629 63			\$64 13				1,098 48		270 70			1,026 56	5,843 25
Commonwealth Park Playground.....			1,137 19		3 87							377 93					313 66	1,832 65
Cottage Street Playground.....		11 82	1,387 18		746 84			16 59				254 36		11 25			517 41	2,945 45
Dummy Field.....			140 99									92 52			\$200 00		94 40	533 91
Factory Hill Playground.....			7 54						18 52			6 50					7 42	39 98
Fellows Street Playground.....		12 81	562 66		1,021 93			56 99				214 01		50 02			408 86	2,327 28
First Street Playground.....		75 88	773 27		1,822 76							398 95	\$85 32				672 60	3,828 78
Forest Hills Playground.....		9 00	900 68	250 39	605 59	36 19			297 51			236 51					483 66	2,819 53
Franklin Field Playground.....	\$1,026 43	145 32	2,983 49	430 75	2,814 99	8,640 36		1,084 47		\$1,298 76		5,570 47					5,085 54	29,080 58
Gibson Playground.....		20 91	1,185 15	5 25	1,025 54							665 12		17 98			619 23	3,539 28
John Winthrop Playground.....			493 94				82 11	16 19				247 94		120 49			205 20	1,165 87
Marcella Street Playground.....		126 75	1,805 30		1,189 69			82 50				739 76		29 78			833 02	4,806 80
Massachusetts Avenue Playground.....			611 21									71 54		6 00	300 00		210 76	1,199 51
Mt. Ida Playground.....			497 98		18 95	337 09						27 14					187 74	1,968 96
Mystic Playground.....		18 90	810 29		1,021 86	26 68		15 50				123 89		6 00			431 16	2,454 22
Neponset Playground.....		5 91	893 41		74 98							105 43		21 26			234 70	1,335 69
Norfolk Street Playground.....					25 83							1 00					6 50	33 33
North Brighton Playground.....		8 73	2,265 00	12 57	1,402 49			152 00	611 72			1,473 76					1,250 91	7,177 08
Orient Heights Playground.....			556 77			38 25			13 50			214 51					175 42	998 45
Paris Street Playground.....		6 75	21 75			311 17						7 00					74 10	420 77
Parker Hill Playground.....		11 25	687 25									29 93					155 23	883 96
Parkinson Playground.....			497 38	8 91								150 90			525 44		251 53	1,434 16
Portsmouth Street Playground.....		1 50	234 59			51 50						89 56		20 86			84 77	482 78
Prince Street Playground.....		19 62	1,238 46						\$396 81			208 79				\$51 82	408 31	2,323 81
Randolph Street Playground.....		6 57	910 51		1,658 02							606 20		91 27			702 45	4,065 02
Ripley Playground.....			448 26			5 00			336 19			17 04					171 92	978 41
Rogers Park Playground.....		12 00	1,249 66						328 18			396 24		49 10			433 74	2,468 92
Rosindale Playground.....		6 75	618 90		552 54				160 31			139 14					314 88	1,792 52
Rutherford Avenue Playground.....		12 07	21 13			49 74	3 50			98 90		4 00					41 22	230 56
Savin Hill Playground.....			472 04		175 53							1,281 63					407 53	2,336 73
Tyler Street Playground.....		7 25	25 38									1 00					7 53	41 16
Ward 19 Playground.....						1,716 18	72 60					32 84					388 26	2,209 88
West Fifth Street Playground.....		3 38	539 75		721 96			14 94				24 22		39 14			286 36	1,629 75
West Third Street Playground.....		2 68	509 53		681 72							22 29		20 15			263 57	1,499 94
William Eustis Playground.....		6 75	1,596 46		1,405 18							627 66		173 67			800 37	4,610 09
Ward 3 Gymnasium.....					4,288 43												687 07	4,975 50
Ward 7 Gymnasium.....					6,275 03												1,005 38	7,280 41
Ward 8 Gymnasium.....					2,257 29												361 71	2,619 00
Ward 9 Gymnasium.....					6,243 92												1,000 44	7,244 36
Ward 16 Gymnasium.....					6,242 96												1,000 22	7,243 18
D Street Gymnasium.....					11,429 90												1,831 26	13,261 16
East Boston Gymnasium.....					17,579 66												2,816 55	20,396 21
Cabot Street Gymnasium.....					4,742 08												739 75	5,501 83
Curtis Hall Gymnasium.....					3,426 38												548 96	3,975 34
North Bennet Street Gymnasium.....					4,555 29												729 83	5,285 12
Malloch's Wharf.....						107 33						2 09					24 10	133 43
Smith's Pond.....												53 06					11 80	64 86
North End Playground.....												205 39					21 70	227 09
	\$1,026 43	\$880 38	\$32,488 48	\$734 72	\$88,331 79	\$12,475 66	\$486 23	\$1,503 31	\$1,883 13	\$495 71	\$1,298 76	\$17,781 62	\$85 32	\$1,357 88	\$1,025 44	\$51 82	\$30,787 87	\$192,494 55



Expenditures on Account of Maintenance.

BATHS AND BEACHES.	Buildings.	Construction Building.	Miscellaneous Accounts.	General Expense.	Totals.
Cabot Street Bath.....	\$18,036 67	.....	.....	\$5,148 50	\$23,185 17
Copley School Bath.....	2,960 25	.....	.....	845 13	3,805 38
Curtis Hall Bath.....	10,122 51	.....	.....	2,889 82	13,012 33
Dewey Beach Bath.....	4,233 50	.....	.....	1,208 59	5,442 09
Dover Street Bath.....	20,454 96	.....	.....	5,839 50	26,294 46
Freeport Street Bath.....	2,962 53	.....	.....	845 80	3,808 33
Girls' Latin School Bath.....	700 39	.....	.....	199 95	900 34
L Street Bath.....	19,566 41	.....	.....	5,608 60	25,175 01
McKenzie Beach Bath.....	2,710 23	.....	.....	773 75	3,483 98
North Bennet Street Bath.....	16,974 44	.....	.....	4,845 93	21,820 37
North End Beach Bath.....	14,853 95	\$278 34	.....	4,319 72	19,452 01
Spring Street Bath.....	1,622 38	.....	.....	463 16	2,085 54
Tenean Beach Bath.....	2,927 05	.....	.....	835 40	3,762 45
Wood Island Bath.....	2,138 43	.....	.....	610 52	2,748 95
Border Street Floating Bath.....	1,998 46	.....	.....	570 40	2,568 86
Dover Street Floating Bath.....	876 08	.....	.....	249 50	1,125 58
East Boston Wharf.....	5,143 21	.....	.....	1,468 30	6,611 51
Fort Point Channel Floating Bath.....	1,075 83	.....	.....	307 10	1,382 93
Jeffries Point Floating Bath.....	443 17	.....	.....	126 40	569 57
Mystic Bridge Floating Bath.....	745 46	.....	.....	212 50	957 96
Warren Bridge Floating Bath.....	1,176 58	.....	.....	335 50	1,512 08
Dover Street Laundry.....	8,583 79	.....	.....	2,450 58	11,034 37
North End Park Laundry.....	1,501 30	.....	.....	428 30	1,929 60
Randidge Fund.....	130 00	.....	.....	.....	130 00
Charlesbank Floating Baths.....	1,466 78	.....	.....	418 60	1,885 38
General repairs.....	5,414 29	.....	.....	880 90	6,295 19
Towing.....	1,074 12	.....	.....	174 75	1,248 87
Ward 16 Bath.....	1,894 47	.....	.....	540 83	2,435 30
Orchard Park Bath.....	13 50	.....	.....	3 96	17 46
Miscellaneous accounts.....	.....	.....	\$2,501 23	.....	2,501 23
Celebration and Entertainments (Music):					
Musicians.....	\$17,539 03				
Employees.....	2,595 95				
Teaming.....	1,125 16				
Repairing stands.....	441 62				
Decorations and supplies..	413 82				
Rent of halls.....	328 00				
Lectures.....	287 50				
Lighting stands.....	262 50				
	\$22,993 58				22,993 58
	\$151,800 74	\$278 34	\$2,501 23	\$42,601 99	\$220,175 88

RECAPITULATION.

*Expenditures on account of maintenance from February 1, 1913,
to January 31, 1914.*

Parks and gardens	\$562,513 99	
Playgrounds and gymnasias	192,494 55	
Baths and beaches	197,182 30	
Celebrations and entertainments . .	22,993 58	
		\$975,184 42
Expenditures on account of land and construction from February 1, 1913, to January 31, 1914		628,033 90
		<u>\$1,603,218 32</u>

CASH RECEIPTS OF THE PARK AND RECREATION DEPARTMENT FROM FEBRUARY 1, 1913, TO JANUARY 31, 1914.

PARK DIVISION.

Received for labor on the suppression of gypsy and brown-tail moths	\$16,013 97
Received from the Commonwealth for moth suppression	10,389 54
Received for labor for other city departments, etc.	3,401 02
Received from the sale of sheep, wood, tools, junk, grass, shrubs, use of towels and soap, etc.	2,021 53
Received from the sale of buildings	4,718 57
Rents	3,775 93
	<u>\$40,320 56</u>

RECREATION DIVISION.

Received for use of towels and soap, etc. (as per classification in detail on page 34)	29,690 82
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Charlestown Heights and Dewey Beach Improvements.

Received from the sale of land	3,910 00
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Zoological Garden and Aquarium.

Received from the sale of stone	265 50
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Total receipts for 1913-14	<u>\$74,186 88</u>
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Above receipts were credited as follows:

General revenue, city income	\$35,302 33
Sinking fund	4,718 57
Appropriation, Park and Recreation Department	29,990 48
Appropriation, Charlestown Heights and Dewey Beach Improvements	3,910 00
Appropriation, Zoological Garden and Aquarium	265 50
	<u>\$74,186 88</u>

Park Betterments Collected by City Collector to January 31, 1914.

	Assessments Committed to Collector.	Abated.	Net Assess- ments.	Collected.	Outstand- ing Jan. 31, 1913.
Public Park, Back Bay...	\$434,600 00	\$144,195 73	\$290,404 27	\$290,404 27	
Marine Park.....	23,543 00	12,616 80	10,926 20	10,926 20	
Franklin Park.....	135,029 00	122,000 66	13,028 34	13,028 34	
Parkway, Old Harbor....	60,789 00	50,426 00	10,363 00	8,256 00	\$2,107 00
" Muddy River...	108,972 00	83,594 25	25,377 75	23,238 75	2,139 00
" West Roxbury..	154,107 00	113,808 00	40,299 00	31,913 00	8,386 00
" Dorchester.....	9,713 00	3,055 54	6,657 46	5,927 74	729 72
	\$926,753 00	\$529,696 98	\$397,056 02	\$383,694 30	\$13,361 72

Public Park and Playground Debt.

Liabilities.

Total loans outstanding January 31, 1914 . . . \$15,064,910 98

Resources.

Sinking fund January 31, 1914 8,240,370 47

Net debt January 31, 1914 \$6,824,540 51

Classification of the Cash Receipts of the Recreation Division of the Park and Recreation Department from February 1, 1913,
to January 31, 1914.

	Towels.	Soap.	Pool.	Valuation Envelope.	Suits.	Trunks.	Caps.	Total.
Border Street Floating Bath (men).....	\$52 71	.....	.....	.....	\$0 05	.....	.....	\$52 76
Border Street Floating Bath (women).....	3 14	.....	.....	.....	70 68	.....	.....	73 82
Cabot Street Bath.....	1,217 17	\$502 34	\$1,862 09	\$10 30	.....	.....	\$15 95	3,607 85
Charlesbank Floating Bath (men).....	85 97	.....	.....	.....	.....	.....	.....	85 97
Charlesbank Floating Bath (women).....	2 91	.....	.....	.....	26 25	.....	.....	29 16
Copley School Baths.....	156 79	57 71	.....	.....	.....	.....	.....	214 50
Curtis Hall Bath.....	430 73	147 98	3,886 27	7 15	.....	.....	28 42	4,500 55
D Street Gymnasium.....	472 59	179 79	.....	.....	.....	.....	.....	652 38
Dewey Beach (men).....	45 19	.....	.....	50	63 40	\$38 50	.....	147 59
Dewey Beach (women).....	5 82	.....	.....	.....	84 95	.....	.....	90 77
Dover Street Bath.....	2,720 82	1,543 14	.....	.....	.....	.....	.....	4,263 96
Dover Street Bridge Floating Bath (men).....	49 98	.....	.....	.....	20	.....	.....	50 18
Dover Street Bridge Floating Bath (women).....	26 05	.....	.....	.....	7 35	.....	.....	33 40
East Boston Gymnasium.....	803 00	364 76	.....	.....	.....	.....	.....	1,167 76
Fort Point Channel Floating Bath.....	54 84	.....	.....	35	.....	.....	.....	55 19
Freeport Street Bath.....	6 00	.....	.....	.....	26 55	12 45	.....	45 00
Girls' Latin School Baths.....	14 25	4 06	.....	.....	.....	.....	.....	18 31
Jeffries Point Floating Bath.....	3 39	.....	.....	.....	5 62	12	.....	9 13
L Street Bath (men).....	1,243 14	.....	.....	524 25	.....	2,727 30	.....	4,494 69
L Street Bath (boys).....	.....	.....	.....	.....	.....	.....	.....	.....
L Street Bath (women).....	97 32	.....	.....	23 40	859 57	.....	.....	980 29

[illegible]

Park and Recreation Statistics to January 31, 1914.

PARKS.	Year of Acquisition.	COST TO DATE.			Area.	Length of Drive-ways.	Length of Walks.	Length of Rides.	Area of Ponds and Rivers.
		Land.	Construction.	Totals.					
MAIN PARK SYSTEM:									
Commonwealth avenue.....	1894-1905.....	.....	\$154,188 53	\$154,188 53	112.7 acres	12.1 miles	11.9 miles		
Fens.....	1877-1879.....	\$596,254 49	2,175,715 22	2,771,969 71	115 "	4.32 "	7.04 "	1.1 miles	22 acres
* Riverway.....	1890.....	457,457 53	674,296 32	1,131,753 85	40 "	1.4 "	2.8 "	1.2 "	8 "
† Olmsted Park.....	1890 and 1892.	1,081,947 60	754,373 59	1,836,321 19	180 "	2.7 "	5.8 "	1.6 "	77 "
Arborway.....	1892.....	245,584 25	381,793 81	627,378 06	36 "	3.4 "	3.2 "	1.4 "	
Arnold Arboretum.....	1882 and 1895,	79,354 15	388,372 84	467,726 99	223 "	3.4 "	5.65 "	.....	0.6 acre
West Roxbury Parkway.....	1894.....	135,265 29	22,123 21	157,388 50	150 "	2.8 "	4.3 "	2.4 "	
Franklin Park and Zoological Garden.....	1883 and 1884,	1,551,896 63	2,704,978 60	4,256,875 23	527 "	7.91 "	14.9 "	1 mile	7.4 acres
MARINE PARK SYSTEM:									
Columbia road.....	1899.....	447,528 63	540,511 93	988,040 56					
Dorchesterway.....	1892.....	63,735 54	65,187 12	128,922 66	{ 109 " land 187.5 " flats }	4.2 "	4.5 "		
Strandway.....	{ 1890, 1892 1897 and 1901 }	772,515 12	415,932 21	1,188,447 33					
Marine Park and Aquarium,	1883.....	232,972 57	1,217,477 25	1,450,449 82	{ 52.5 " land 4.9 " flats }	0.5 mile	1.39 "		
† Castle Island.....	1890.....	.....	39,890 91	39,890 91	{ 25.7 " land 78.3 " flats }				
† GOVERNOR'S ISLAND.....	1911.....	.....	20,000 00	20,000 00	73 "	.....	1.95 "		

WOOD ISLAND PARK.....	1882 and 1891,	132,300 00	275,346 93	408,146 93	{ 55.6 " land 155.4 " flats}	0.3 "	2.1 "	
CHARLESBANK.....	1883.....	373,916 99	339,550 40	713,467 39	10 "	.....	1.5 "	
\$ TRINITY TRIANGLE.....	1885.....	30,000 00	.....	30,000 00	0.12 acre	.....	.....	
CHARLESTOWN HEIGHTS	1891.....	50,538 02	144,420 99	194,959 01	{ 6.1 acres land 4.3 " flats}	.....	0.4 mile	
CHARLESTOWN PLAYGROUND,	1891.....	172,923 31	32,931 93	205,855 24	{ 14 " land 4 " flats}	.....	0.6 "	
DORCHESTER PARK.....	1891 and 1903,	64,165 37	16,311 18	80,476 55	26 "	.....	.....	
FRANKLIN FIELD.....	1892.....	157,341 22	194,228 38	351,569 60	77 "	0.65 mile	1.09 miles	
NORTH END BEACH.....	1893.....	328,364 44	169,262 27	497,626 71	{ 3.7 " land 3 " flats}	.....	0.11 mile	
COPP'S HILL TERRACES.....	1893.....	90,858 19	43,222 17	134,080 36	0.6 acre	.....	.....	
{ 1898, 1899 and 1902}		210,239 06	6,940 60	217,179 66	55.4 acres	1.4 miles	.....	
|| CHESTNUT HILL PARK.....								
NORTH BRIGHTON PLAY- GROUND.....	1894.....	22,107 12	30,802 77	52,909 89	14 "	.....	.....	
NEPONSET PLAYGROUND.....	1896.....	24,804 39	26,189 35	50,993 74	18 "	.....	.....	
BILINGS FIELD.....	1896.....	47,068 98	24,367 53	71,436 51	11 "	.....	0.4 "	
FIRST STREET PLAYGROUND,	1897.....	.....	30,840 40	30,840 40	4.6 "	.....	.....	
SPAULDING SQUARE.....	1897.....	4,000 00	.....	4,000 00	0.14 acre	.....	.....	
PRINCE STREET PLAYGROUND,	{ 1897, 1899 and 1901}	180,474 70	7,575 11	188,049 81	0.4 "	.....	.....	
MYSTIC PLAYGROUND.....	1897.....	50,125 00	30,515 54	80,640 54	2.3 acres	.....	.....	
FELLOWS STREET PLAY- GROUND.....	1897.....	14,503 72	11,065 22	25,568 94	0.85 acre	.....	.....	
Carried forward.....		\$7,618,742 31	\$10,938,412 31	\$18,557,154 62	2,381.11 acres	45.08 miles	69.63 miles	8.7 miles, 115.0 acres

Park and Recreation Statistics to January 31, 1914.—Continued.

PARKS.	Year of Acquisition.	COST TO DATE.			Area.	Length of Driveways.	Length of Walks.	Length of Rides.	Area of Ponds and Rivers.
		Land.	Construction.	Totals.					
<i>Brought forward.</i>		\$7,618,742 31	\$10,938,412 31	\$18,557,154 62	2,381.11 acres	45.08 miles	69.63 miles	8.7 miles	115.0 acres.
CHRISTOPHER GIBSON PLAYGROUND.....	1897.....	37,709 58	10,042 75	47,752 33	5.8 acres				
COLUMBUS AVENUE PLAYGROUND.....	{1899, 1900, 1901, 1902}	327,503 84	37,479 58	364,983 42	5 "				
ASHMONT PLAYGROUND.....	1899.....	43,990 09	9,000 00	52,990 09	2.2 "				
SAVIN HILL PLAYGROUND.....	1899 and 1914,	27,147 30	11,138 36	38,285 66	{ 8.35 " land 24.35 " Hats				
ROSLINDALE PLAYGROUND.....	1899 and 1913,	26,125 11	14,005 71	40,130 82	3.8 "				
FOREST HILLS PLAYGROUND..	1902.....	25,166 75	15,000 00	40,166 75	9.6 "				
COTTAGE STREET PLAYGROUND,	1902.....	47,002 32	8,747 68	55,750 00	3.85 "				
RANDOLPH STREET PLAYGROUND.....	1903.....	256,440 63	27,302 32	283,742 95	2.8 "				
MARCELLA STREET PLAYGROUND.....	1903 and 1905,		35,155 28	35,155 28	5.1 "				
4 ROGERS PARK.....	1899.....	30,000 00	5,353 11	35,353 11	6.9 "				
8 BERNERS SQUARE.....	1901.....		294 70	294 70	1.3 "				
9 OAK SQUARE.....	1902.....		1,279 89	1,279 89	0.22 acre				
5 CAMBRIDGE, LINCOLN AND MANSFIELD STREETS.....	1910.....				0.32 "				
6 COMMONWEALTH PLAYGROUND.....	1905.....		8,633 91	8,633 91	8.07 acres				

	1909.....	31,925 55	9,074 45	41,000 00	8.26 "			
SAYIN HILL PARK.....	1909.....	31,925 55	9,074 45	41,000 00	8.26 "			
ORIENT HEIGHTS PLAY- GROUND.....	1909.....	10,015 00	26,124 02	36,139 02	{ 5.24 " land 3.07 " flats			
WEST THIRD STREET PLAY- GROUND.....	1903.....	10,201 30	4,000 00	14,201 30	0.28 acre			
WEST FIFTH STREET PLAY- GROUND.....	1909.....	10,201 30	4,597 40	14,798 70	0.41 "			
WILLIAM EUSTIS PLAY- GROUND.....	1909.....	68,187 06	24,477 49	92,664 55	4.88 acres			
JOHN WINTHROP PLAYGROUND, PLAYGROUNDS, INVESTIGATING SITES.....	1911.....	20,994 26	13,682 97	34,677 23	1.57 "			
		295 29	.....	295 29				
7 MASSACHUSETTS AVENUE PLAYGROUND.....	1912.....	.....	1,500 00	1,500 00	2.76 "			
NORFOLK STREET PLAYGROUND, 1912 and 1914,	1912 and 1914,	22,011 33	26,106 41	48,117 74	6.34 "			
7 PARKINSON PLAYGROUND....	1912.....	.....	1,565 00	1,565 00	4.5 "			
PARIS STREET PLAYGROUND....	1912.....	50,630 64	4,988 50	55,619 14	1.27 "			
Mt. Ida PLAYGROUND.....	1912.....	85,458 20	1,709 28	87,167 48	11.07 "			
RUTHERFORD AVENUE PLAY- GROUND.....	1912.....	70,606 07	7,068 58	77,674 65	1.07 "			
TYLER STREET PLAYGROUND....	1912.....	26,239 19	10,387 81	36,627 00	0.26 acre			
CAROLINA AVENUE PLAY- GROUND.....	1912.....	25,477 60	1,972 78	27,450 38	3.08 acres			
PORTSMOUTH STREET PLAY- GROUND.....	1912.....	15,000 00	5,547 87	20,547 87	4.29 "			
Carried forward.....	.....	\$8,887,070 72	\$11,264,648 16	\$20,151,718 88	2,327.12 acres	45.08 miles	69.63 miles	8.7 miles 115.0 acres

Park and Recreation Statistics to January 31, 1914.—*Concluded.*

PARKS.	Year of Acquisition.	Cost to DATE.		Area.	Length of Drive-ways.	Length of Walks.	Length of Rides.	Area of Ponds and Rivers.
		Land.	Construction.					
<i>Brought forward.....</i>								
10 PARKER HILL PLAYGROUND ..	1912.....	\$8,887,070 72	\$11,264,648 16	2,527.12 acres	45.08 miles	69.63 miles	8.7 miles	115.0 acres
7 DUMMY FIELD.....	1910.....			4.5 "				1.6 "
11 WHARF PROPERTY, FREEPORT STREET, DORCHESTER.....	1912.....		28 00	6.4 "				
12 FACTORY HILL PLAYGROUND..	1912.....			{ 1.15 " land 2.54 " flats				
9 PAUL GORE STREET P L A Y- GROUND.....	1913.....			5.2 "				
13 RIPLEY PLAYGROUND.....	1913.....			0.74 acre				
WARD 19 PLAYGROUND.....	1913.....	69,120 00		0.86 "				
13 WOOD PLAYGROUND.....	1913.....			2.55 acres				
14 SMITH'S POND PLAYGROUND..	1914.....			3.1 "				
General account.....				20.08 "				
Park Nursery.....			73,987 50					
Betterment expenses.....			29,947 07					
Four spraying machines.....	1912.....		13,356 10					
Seating accommodations.....	1912.....		4,400 00					
			2,813 03					

Horticultural Building.....	1913.....		550 00	550 00				
Parkman House.....	1913.....		6,000 00	6,000 00				
		\$8,956,190 72	\$11,395,729 86	\$20,351,920 58	2,574.24 acres	45.08 miles	69.63 miles	8.7 miles
								116.6 acres

* An additional area of 16½ acres is within the limits of the town of Brookline.

† An additional area of 18 acres is within the limits of the town of Brookline.

‡ Custody given to the city by Act of Congress.

§ Transferred to Public Grounds Department.

|| 49 acres transferred from Water Department; an additional area of 160.65 acres, including water area of 122.70 acres, is under the control of the Metropolitan

Water and Sewerage Board.

1 Transferred from, and \$454.15 expended by, the Public Grounds Department.

2 Transferred to Street Department and from Street Department to Public Grounds Department.

3 25,470 square feet transferred from, and \$2,000 expended by, the Public Grounds Department.

4 Transferred from, and \$30,000 expended for land by, the Public Grounds Department.

5 Transferred from Street Commissioners.

6 Custody given to the city by Statutes 1891, chapter 421.

7 Leased by Park Department.

8 Originally dedicated for a square by David Sears, and released to the city by his heirs.

9 Transferred from School Department.

10 Transferred from Public Works Department, Water Service.

11 Transferred from Public Works Department, Sanitary Division.

12 Acquired by annexation of Hyde Park.

13 Acquired by gift.

14 Transferred from Metropolitan Park Commission.

Of the above total lengths of driveways, walks and rides, there have been completed to date, respectively, 40.8 miles, 59.2 miles and 6.3 miles.

Beaches, Swimming Pools and Floating Baths Attendance, 1913-14.

	Men.	Boys.	Pool.	Women.	Girls.	Total.
Dover Street Bridge Floating Bath.....	8,214	77,685	.....	14,240	27,427	127,566
L Street Bath House.....	520,900	541,034	.....	63,065	148,285	1,273,284
Wood Island Park Bath.....	23,020	59,005	.....	16,210	32,815	131,050
Border Street Floating Bath.....	12,501	135,045	.....	25,236	66,156	238,938
North End Park.....	10,025	284,976	.....	42,809	86,209	424,019
Dewey Beach Bath.....	25,857	85,030	.....	14,019	67,438	192,344
Charlesbank Floating Bath.....	26,225	63,265	.....	2,120	3,467	95,077
Jeffries Point Floating Bath.....	224	20,232	.....	1,682	15,246	37,384
Warren Bridge Floating Bath.....	33,617	75,849	.....	33,676	58,065	201,207
Spring Street Bath (river).....	1,275	9,091	.....	4	2,698	13,068
Tenean Beach Bath.....	18,445	39,248	.....	9,910	33,750	101,353
Mystic Bridge Floating Bath.....	2,470	21,940	.....	700	9,235	34,345
Curtis Hall Pool.....	.....	.....	39,521	.....	.....	39,521
Cabot Street Pool.....	.....	.....	15,982	.....	.....	15,982
Ward 16 Pool.....	.....	.....	5,269	.....	.....	5,269
McKenzie Beach Bath.....	9,177	37,794	.....	6,557	23,499	77,027
Freeport Street Bath.....	8,235	24,835	.....	7,230	21,895	62,195
Fort Point Channel Floating Bath.....	7,411	30,902	.....	.....	.....	38,313
Savin Hill Beach.....	65,537	60,609	.....	56,000	1,310	183,456
	773,133	1,566,540	60,772	293,458	597,495	3,291,398

Shower Baths Attendance, 1913-14.

	Men.	Boys.	Pool.	Women.	Girls.	Total.
Dover Street Bath.....	218,156	6,342	.....	44,737	14,246	283,481
Cabot Street Bath.....	69,385	31,631	.....	21,921	10,044	132,981
North Bennet Street Bath.....	248,930	25,721	.....	59,267	24,252	358,171
Ward 16 Gymnasium.....	33,873	25,220	.....	13,174	11,282	83,549
Ward 7 Gymnasium.....	4,897	6,738	.....	6,708	4,782	23,125
Ward 9 Gymnasium.....	18,522	2,117	.....	1,459	857	22,955
East Boston Gymnasium.....	64,706	20,826	.....	10,146	13,254	108,932
L Street Bath.....	520,900	541,034	.....	63,065	148,285	1,273,284
D Street Gymnasium.....	40,851	22,186	.....	3,948	9,935	76,920
Copley School Baths.....	17,045	5,865	.....	6,170	3,710	32,790
Curtis Hall Baths.....	46,140	78,825	.....	18,195	21,487	164,647
Ward 3 Gymnasium.....	45,689	24,895	.....	8,661	11,081	90,326
Girls' Latin School.....	2,720	2,978	.....	718	1,234	7,650
Totals.....	1,331,814	794,378	.....	253,169	274,449	2,658,810

Gymnasias — Class and Individual Attendance, 1913=14.

	Indi- viduals.	Men.	School Boys.	Working Boys.	Women.	Girls.	Mothers.	Total.
Cabot Street Gymnasium.....	9,173	5,571	9,562	3,175	4,701	4,830	993	38,005
North Bennet Street Gymnasium,	3,010	5,563	9,639	1,502	2,240	2,785	1,774	26,513
Ward 16 Gymnasium.....	4,778	9,055	9,534	6,661	9,383	9,109	1,543	50,063
Ward 7 Gymnasium.....	2,091	2,758	4,173	1,621	2,065	2,717	.....	15,425
Ward 9 Gymnasium.....	1,467	2,065	3,718	326	673	2,043	520	10,812
East Boston Gymnasium.....	3,538	6,157	7,500	3,566	4,266	7,642	558	33,227
D Street Gymnasium.....	1,406	5,393	5,125	2,193	905	3,337	.....	18,359
Curtis Hall Gymnasium.....	5,335	6,835	8,255	6,185	7,890	6,035	2,705	43,240
Ward 3 Gymnasium.....	3,279	2,160	3,450	1,775	1,846	4,437	765	17,712
	34,077	45,557	60,956	27,004	33,969	42,935	8,858	253,356

Skating and Toboggan Attendance, 1913=14.

	Days.	Total Attendance.	Average Attendance.
Ashmont Playground.....	20	9,950	497
Billings Field.....	28	21,157	755
Columbus Avenue.....	7	8,500	1,214
Charlesbank.....	23	16,700	726
Charlestown Playground.....	22	15,385	699
Commonwealth Park.....	22	15,450	702
Cottage Street Playground.....	20	14,280	714
First Street Playground.....	23	33,900	1,475
Franklin Field.....	28	138,850	4,595
Gibson Playground.....	16	9,450	590
Neponset Playground.....	19	10,850	571
North Brighton Playground.....	23	36,150	1,571
Olmsted Park.....	2	1,400	700
Orient Heights Playground.....	23	11,475	499
Randolph Street Playground.....	26	6,780	260
Savin Hill Playground.....	28	15,850	566
Strandway Playground.....	25	24,275	971
William Eustis Playground.....	28	16,205	578
Wood Island Park.....	23	35,450	1,541
Mystic Playground.....	5	528	104
Totals.....	411	442,585	19,828
Tobogganing, Franklin Park.....	21	17,700	843

Report for the baseball season, which includes only Saturday afternoons and holidays, for 1913-14:

PLAYGROUNDS.	Number of Diamonds.	Number of Permits Issued.	Number of Players.
Ashmont.....	2	29	580
Charlestown.....	3	45	900
Chestnut Hill.....	3	64	1,280
Billings Field.....	4	32	640
Christopher Gibson.....	3	58	1,160
Dorchester Park.....	1	9	180
Columbus Avenue.....	2	47	940
Commonwealth Park.....	6	115	2,300
Cottage Street.....	2	31	620
Dummy Field.....	3	37	740
Franklin Field.....	18	348	6,960
First Street.....	1	26	520
Forest Hills.....	4	99	1,980
Fenway.....	2	46	920
Marcella Street.....	3	63	1,260
Neponset.....	2	34	680
North Brighton.....	5	49	980
Mystic.....	1	10	200
Olmsted Park.....	2	37	740
Orient Heights.....	2	26	520
Randolph Street.....	2	51	1,020
Rogers Park.....	2	47	940
Roslindale.....	1	19	380
Strandway.....	6	104	2,080
Savin Hill.....	3	54	1,080
William Eustis.....	3	41	820
Wood Island.....	3	71	1,420
North End Park.....	1	16	320
Massachusetts Avenue.....	2	23	460
Parkinson Lot.....	1	14	280
Totals.....	93	1,645	32,900

Each permit is figured as two teams and two substitutes, making twenty.

Total Annual Attendance.

Wood Island Park	174,180
William Eustis Playground	232,183
Strandway	298,840
Savin Hill Playground	277,488
Roslindale Playground	98,011
Randolph Playground	60,080
Prince Street Playground	266,149
North Brighton Playground	175,452
Orient Heights Playground	53,750
Aquarium	964,467
Ashmont Playground	105,302
West Fifth Street Playground	73,479
Rogers Park Playground	16,250
West Third Street Playground	57,507
Golf Links	22,579
Franklin Park Library	47,980
Portsmouth Street Playground	13,320
Gibson Playground	105,440
Neponset Playground	112,289
Marcella Street Playground	294,503
Mt. Ida Playground	118,440
Mystic Playground	61,578
Franklin Field	195,671
Forest Hills Playground	109,857
First Street Playground	347,289
Cottage Street Playground	120,929
Columbus Avenue Playground	217,900
Chestnut Hill Playground	16,163
Charlestown Playground	306,600
Charlesbank, women's gymnasium	442,007
Charlesbank, men's gymnasium	143,200
Billings Field	81,614
Total	<u><u>5,610,515</u></u>



ANNUAL REPORT
OF THE
PENAL INSTITUTIONS DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1914.

Boston, February 2, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— The seventeenth annual report of the Penal Institutions Department is respectfully submitted, in compliance with chapter 3, section 24, of the Revised Ordinances.

This department has charge of the Suffolk County House of Correction and the steamer "Monitor."

Items of expenditure, income and actual cost are as follows:

FINANCIAL STATEMENT.

House of Correction.

Appropriation	\$230,000 00
Transfer from House of Correction material and machinery for manufacturing	2,308 84
	\$232,308 84
<i>Carried forward</i>	
	\$232,308 84

Brought forward \$232,308 84

Office Expenses.

Appropriation \$22,000 00
 Transfer from House of Correction
 material and machinery for
 manufacturing 1,333 54
23,333 54

Steamer "Monitor."

Appropriation \$31,000 00
 Less returned to City Treasurer 114 06
30,885 94
\$286,528 32

EXPENDITURES.

House of Correction \$232,308 84
 Penal Department, office expenses 23,333 54
 Steamer "Monitor" 30,885 94
\$286,528 32

HOUSE OF CORRECTION.

Income accounts committed to City Collector for
 year ending January 31, 1914 \$1,440 81

Actual collections for year ending January 31,
 1914, irrespective of when deposited \$1,240 66

NET COST OF HOUSE OF CORRECTION, 1913-14.

Expended.	Cash Income.	Net Cost.
<u>\$232,308 84</u>	<u>\$1,240 66</u>	<u>\$231,068 18</u>

Table Showing Gross Cost of House of Correction for Five Years.

YEAR ENDING	January 31, 1910.	January 31, 1911.	January 31, 1912.	January 31, 1913.	January 31, 1914.
	\$226,089 92	\$204,069 55	\$205,020 35	\$228,698 99	\$232,308 84

Net Cost per Week per Inmate for Five Years.

YEAR ENDING	January 31, 1910.	January 31, 1911.	January 31, 1912.	January 31, 1913.	January 31, 1914.
	\$2 90	\$3 22	\$3 55	\$4 01	\$4 28

Gross Expenditure per Week per Inmate, Classified.

YEAR ENDING	Average Number.	Salaries.	Subsistence.	Fuel and Light.	Clothing and Bedding.	Repairs.	Agricultural.	Medical Supplies.	All Other Items.	Totals.
January 31, 1910.....	1,479	\$0 93	\$1 07	\$0 28	\$0 31	\$0 09	\$0 07	\$0 02	\$0 17	\$2 94
January 31, 1911.....	1,204	1 12	1 14	19	27	18	13	03	20	3 26
January 31, 1912.....	1,100	1 28	1 17	36	27	13	11	03	23	3 58
January 31, 1913.....	1,092	1 39	1 41	30	28	11	13	02	39	4 03
January 31, 1914.....	1,037	1 59	1 31	34	31	16	09	03	48	4 31

EXPENDITURES CLASSIFIED.

House of Correction.

Salaries and wages:

James H. Cronin, master	\$2,541 35	
Employees	83,453 00	
		\$85,994 35
Pensions		2,284 00
Food		70,406 62
Ice		434 69
Clothing		15,143 49
Bedding		1,838 27
Furniture and upholstery and household supplies,		6,536 89
Fuel		17,441 91
Light:		
Electric lights	\$506 73	
Oils	120 96	
		627 69
Medical and surgical supplies	\$1,380 51	
Liquors	5 00	
		1,385 51
Printing		295 89
Advertising		9 30
Stationery		326 54
Postage		285 85
Religious services		2,372 06
Instruction and amusement:		
Entertainment of inmates	\$92 84	
Library and school supplies	229 30	
		322 14
Disinfectants		1,698 52
Repairs and improvements		8,510 16
Agricultural		5,091 06
Freight		30 70
Transportation		187 37
Tobacco		279 50
Soap and laundry supplies		1,091 12
Telephones		213 64
Gratuities		267 32
Paid on account of Uniform Desertion Act		9,166 25
Insurance		68 00
		\$232,308 84

DEER ISLAND IMPROVEMENTS.

Balance, February 1, 1913 \$7,182 17

Expenditures.

Henry S. Clark, labor and materials,	\$1,774 85
Pettingell-Andrews Company, electrical supplies	1,382 25
Daniel Russell Boiler Works, Inc.	976 80
Lawler Brothers, final payment on account of contract on wharf at Deer Island	668 44
F. W. Webb Manufacturing Company, plumbing supplies	637 22
D. B. Maclary & Son Company, elevator	600 00
Charles Stetson, labor and material,	408 15
J. P. O'Connell & Co., pipe and cement	383 24
Curtis & Pope Lumber Company, lumber	129 65
H. H. Atwood, professional services,	75 00
Public Works Department, water service	64 50
H. W. Chesterton Company	45 00
Walworth Manufacturing Company,	21 67
<i>City Record</i> , advertising	7 10
Dana Hardware Company	5 80
Gibby Foundry Company	2 50
	<u><u>\$7,182 17</u></u>

EXHIBIT OF INDUSTRY ACCOUNTS.

Clothing Department.

<i>Dr.</i>		<i>Cr.</i>	
To stock on hand		By sales of goods from	
February 1, 1913	\$3,732 15	February 1, 1913, to	
To stock, tools, etc.,		January 31, 1914	\$6,271 68
purchased February		By stock on hand	
1, 1913, to January		January 31, 1914	2,832 55
31, 1914	4,707 38	By net loss	1,184 09
To amount expended			
for salaries from			<u><u>\$10,288 32</u></u>
February 1, 1913, to			
January 31, 1914	1,848 79		
	<u><u>\$10,288 32</u></u>		

Outstanding Accounts.

<i>Dr.</i>		<i>Cr.</i>	
To accounts outstanding January 31, 1913	\$1,643 08	By cash paid to City Collector February 1, 1913, to January 31, 1914	\$6,990 23
To accounts committed to City Collector February 1, 1913, to January 31, 1914	5,694 74	By outstanding accounts January 31, 1914	347 59
	<u>\$7,337 82</u>		<u>\$7,337 82</u>

Stone Department.

<i>Dr.</i>		<i>Cr.</i>	
To stock on hand February 1, 1913 . .	\$5,910 81	By sales of goods February 1, 1913, to January 31, 1914 .	\$15,793 02
To stock, tools, etc., purchased February 1, 1913, to January 31, 1914	11,108 08	By stock on hand January 31, 1914 . .	7,211 93
To amount expended for salaries February 1, 1913, to January 31, 1914 . . .	2,574 79		<u>\$23,004 95</u>
To net profits . . .	3,411 27		
	<u>\$23,004 95</u>		

Outstanding Accounts.

<i>Dr.</i>		<i>Cr.</i>	
To accounts committed to City Collector February 1, 1913, to January 31, 1914	\$16,557 35	By cash paid to City Collector February 1, 1913, to January 31, 1914	\$15,872 96
	<u>\$16,557 35</u>	By abatement . . .	650 18
		By outstanding accounts January 31, 1914	34 21
			<u>\$16,557 35</u>

Statistical Tables Consolidated.

POPULATION.	1909.	1910.	1911.	1912.	1913.
Number of inmates beginning of fiscal year.....	1,525	1,354	1,246	1,084	1,034
Number received during year.....	10,044	10,147	9,718	7,892	7,352
Number discharged during year.....	10,215	10,255	8,634	7,942	7,342
Number at end of fiscal year.....	1,354	1,246	1,084	1,034	1,044
Daily average attendance (i. e., number of inmates actually present) during fiscal year.....	1,484	1,024	1,100	1,092	1,037
Average number of officers and employees during fiscal year.....	118	120	130	138	136

Consolidated Financial Statement.

EXPENDITURES.	1909.	1910.	1911.	1912.	1913.
CURRENT EXPENSES.					
Salaries and wages.....	\$75,766 53	\$74,725 87	\$78,846 74	\$84,706 46	\$90,432 18
Clothing.....	21,205 18	15,336 30	12,363 16	13,911 72	15,143 49
Subsistence (inmates).....	69,075 38	56,372 17	52,640 08	62,912 99	53,964 07
Subsistence (officers).....	12,918 94	15,108 12	14,099 35	17,411 85	16,442 55
Ordinary repairs and replacements.....	7,195 40	11,225 49	7,957 17	6,393 91	8,510 16
Office, domestic, outdoor expenses.....	44,052 34	36,075 14	44,635 73	48,949 86	52,254 22
Totals.....	\$230,213 77	\$208,843 09	\$210,542 23	\$234,286 79	\$236,746 67
Per capita cost subsistence (inmates):					
Per year.....	\$46 70	\$46 82	\$47 85	\$57 61	\$52 04
Per week.....	90	90	92	1 11	1 00
Per capita cost subsistence (officers):					
Per year.....	109 48	125 90	108 46	126 17	120 90
Per week.....	2 11	2 42	2 09	2 43	2 33
EXTRAORDINARY EXPENSES.					
New buildings, land.....	\$35,189 69	\$3,477 84			
Permanent improvements.....	12,621 41	17,652 25	\$6,152 68	\$28,365 15	\$7,182 17
Totals.....	\$47,811 10	\$21,130 09	\$6,152 68	\$28,365 15	\$7,182 17
Grand totals.....	\$278,024 87	\$229,973 18	\$216,694 91	\$262,651 94	\$243,928 83

¹ Includes \$4,123.85 account industries.² Includes \$4,773.50 account industries.³ Includes \$5,521.88

account industries.

⁴ Includes \$5,587.80 account industries.⁵ Includes \$4,437.83 account industries.

OFFICE EXPENSES.

Classified.

Salaries:

Fred S. Gore, commissioner	\$5,397 26	
Dennis D. Driscoll, assistant commissioner	2,541 35	
Employees	13,550 06	
		\$21,488 67
Printing		184 52
Stationery		114 73
Postage		128 12
Office expenses		33 92
Telephone and tolls		433 58
Pension		950 00
		<u>\$23,333 54</u>

STEAMER "MONITOR."

Classified.

Salaries	\$16,316 88
Fuel	4,171 21
Repairs	3,055 00
Repairs on wharf	488 49
Rent of dock	4,000 00
Steamer hire	1,200 00
Electric lights	48 60
Chandlery and supplies	497 91
Telephone and tolls	150 65
Furnishings	381 49
Printing	89 80
Stationery	5 91
Pension	480 00
	<u>\$30,885 94</u>

Income accounts committed to City Collector for year ending January 31, 1914	\$51 19
Actual collections for year ending January 31, 1914	<u>\$51 19</u>

NET COST OF STEAMER "MONITOR," 1913-14.

Expended.	Cash Income.	Net Cost.
<u>\$30,885 94</u>	<u>\$51 19</u>	<u>\$30,834 75</u>

The financial exhibit shows a decrease in the money expended for food over that of the next preceding year of \$9,918, and an increase in the item for salaries of \$6,876, and in the amount expended under the Uniform Desertion Act of \$4,228.

That a large saving has been made in the item of food is partly due to the fact that the number of inmates has been less than in 1912, but it is largely due to the close supervision maintained and the strict business methods pursued in buying as well as to an intelligent and economical oversight of the distribution and consumption of food.

The reason for the increase in salaries is that it was deemed advisable to increase the number of officers in order to more nearly and equitably carry out the eight-hour law, but more largely to a general increase in the pay of officers. In August there was put in force, with the approval of the Mayor, a system of regulating and advancing salaries; a minimum salary was established, at which all officers and matrons who perform regular duty start. Advance is made when stated terms of service are attained until a maximum salary is reached, except for those who are employed in a particular work which requires special experience and ability. The minimum for matrons when first employed is \$300 and after one year's experience at the House of Correction advance is made to \$360, which is the maximum. The minimum salary for officers is \$480 per year when first employed and after one year's service at our institution advance to \$540; after two years advance to \$600; after three years advance to \$660 and after four years to \$800, which is the maximum. By adopting such a graded plan it was expected and experience has shown that our officers are placed more on a par, as to salaries, with those of other institutions of a similar character in the state, and that the value of services from long experience and efficiency redound to the benefit of the institution.

The increase in money expended and paid to dependents of inmates sentenced for nonsupport was caused by law enacted in 1911, and known as the "Uniform Desertion Act," which requires the Master to pay to the Probation Officer, for the benefit of wife or children, fifty (50) cents per day for each day's hard labor performed. As the law compels these payments I have no control of the amount expended. This expense for the year has been nearly ten thousand (10,000) dollars, almost double that of the next previous year, and it is anticipated that the amount may reach fifteen thousand (15,000) dollars during the succeeding year. It is my opinion that if the probation officers of the various courts give closer attention to cases of this kind many would not be committed. Particular attention has been

given by the commissioner to this matter and after looking into all the facts and circumstances of the home affairs of the inmate, the power of release on parole authorized by law has been exercised. The methods employed and results observed in these cases will be noted later in this report.

The daily average of the House of Correction was 1,037; that of 1912 was 1,092. The number of commitments was 7,352, which is the smallest for many years; in the year 1912 the number was 7,892. The greatest falling off in the number committed was for the charge of drunkenness, the number during this year being 5,022, while in 1912 the number was 5,731. Of the number committed for nonpayment of fines 1,481 were for drunkenness, and the amount imposed was \$10,795, of which 218 were paid, amounting to \$1,655. For other offences there were committed for nonpayment of fines, 708, the amount imposed being \$8,926, of which 101 were paid, amounting to \$1,749.

The department is keeping in touch with much that has been written and said concerning the segregation or separation of prisoners who are sentenced for the various offences.

The court sentences to houses of correction three classes of offenders; these classes being determined at the institution after the receipt of the court *mittimus*, viz.:

First.— Those who have committed an offence against public order.

Second.— Those who have committed an offence against the person, and

Third.— Those who have committed an offence against property.

It is interesting to note that during the past year a great reduction appears in the number of commitments for drunkenness and other minor offences (see table, page 30) or offences against public order. This falling off of commitments for minor offences is undoubtedly due to a more thorough investigation than has been given in the past by the probation officers who act under the direction of the court.

The number of those committed for offences against the person or against property has not materially changed and no comment seems particularly necessary.

From my first connection with this department I have felt that a segregation or separation of those committed for these different offences should be made.

I am now formulating a plan by which it is intended and expected that a thorough classification and separation of inmates may be made, so that those who are committed for minor offences may not be brought in contact in any way with those who have committed a more serious offence or who may have been of a criminal inclination when at liberty, and all classes from those addicted to the use of drugs. I believe the intemperate use of drugs is a much greater menace to the public and individual than is the intemperate use of alcohol not only in free but in prison life.

In our work of segregation and individual treatment of inmates we are somewhat hampered by the small areas and the style of the buildings. For this reason I think it would be well to take up the idea of employing some of our prisoners outside of the House of Correction plant. This we are now empowered to do under Acts of 1913, chapter 663, which is as follows:

AN ACT RELATIVE TO THE EMPLOYMENT OF PRISONERS IN
RECLAIMING AND CULTIVATING LAND.

Be it enacted, etc., as follows:

SECTION 1. During all times in which outdoor labor is practicable, inmates of penal institutions who are required to labor shall be employed, so far as is possible, in the reclamation of waste places, and in cultivating lands for raising produce to be used in public institutions. Prisoners so employed shall be at all times in the custody and under the direction of the prison officers.

SECT. 2. The county commissioners of any county may purchase or lease land with funds specifically appropriated therefor by the general court for the purpose of improving and cultivating it by the labor of prisoners from a jail or house of correction; and the said commissioners may also make arrangements with the officials of a city or town, or with a private owner, to improve waste or unused land by means of such prison labor. When land that is not the property of the county is so improved, the owners thereof shall pay to the county such sums as may be agreed upon between the county commissioners and the other parties in interest, for the labor of any prisoners employed thereon.

SECT. 3. This act shall take effect upon its passage.

[Approved May 8, 1913.]

I have stated in the annual reports of the past few years that I was of the opinion that the experiment should be tried to establish an adjunct to the House of Correction at Squantum and perhaps at Wellington, on the so-called rifle range.

The ledge at Squantum would furnish the best of material for macadamizing.

The tract at Wellington comprises about 108 acres of very low grade land. By utilizing prison labor in draining, removing stumps, rocks, etc., this land could be reclaimed and, I have no doubt, become of considerable value.

This would greatly aid us in our efforts to classify and separate into classes those committed to our care.

The school has been maintained under supervision of a teacher, assisted by some of the educated inmates.

Very satisfactory advance has been made by those who have taken advantage of this opportunity to learn the English language.

The classes have on average been attended by about fifty, divided between the morning and afternoon sessions.

The benefit of the probation system in this department has been extended to the improvement and betterment of the homes and families of the discharged prisoners as well as to those who are released on a permit to be at liberty. The assistant commissioner, Mr. Dennis D. Driscoll, visits the institution at Deer Island on Tuesday and Thursday, when prisoners may have a personal interview. During the past year over four thousand (4,000) such interviews have taken place. All requests for permits to be at liberty are made in writing and all cases are carefully investigated. We have endeavored to arrange for interviews with the families and also employers, and the assistant commissioner is at the main office in Boston on Monday, Wednesday, Friday and Saturday. Arrangements under certain conditions are agreed upon, which must be lived up to, and if violated and the discharged prisoner becomes injurious to society or to his family he will be returned to the institution. The prisoner on being released must sign an agreement to return to an orderly course of life, take a pledge from his spiritual adviser to abstain from the use of all intoxicating liquors and report to the commissioner's office at least once a week for a specified length of time. We have always tried to have men returned to their former employment, which means much in enabling them to secure the necessities of life and brings much happiness to their homes. The liberation of prisoners committed to this institution for nonpayment of fines has been continued and the amount

of two hundred eighty-eight (288) dollars has been collected at the commissioner's office within the last year on account of those so released. The prisoner is released with the understanding that he is to pay his fine in whole or in part payment, weekly, as soon as he is in a position to do so. The many nonsupport cases committed to the institution are given careful consideration, and at the request of the wife a prisoner is given a permit to be at liberty and in many of these cases their wages are collected and given to the wife. In cases where children are boarding the wages are collected and we have been very successful in paying board of minor children. Some representative of the family must report the conditions and actions while the prisoner is under parole. Any man who has violated his permit to be at liberty under the Uniform Desertion Act, upon the written statement of the wife, is returned to the institution. These cases under the Uniform Desertion Act have been of interest to this department and we have tried to arrange it so that when a prisoner is discharged at the expiration of his sentence some financial support is given in the interest of his wife and family. This law which has been enacted but a few years has been given careful investigation and consideration by this department, and while under parole any man who has violated his parole before the expiration of his sentence is returned to the institution.

One thousand one hundred fifty-six (1,156) men and sixty-eight (68) women were released on a permit to be at liberty by the commissioner under chapter 225 of the Revised Laws. Of these, 1,070 were released on a permit to be at liberty, under section 119; the balance, 154, were released on probation, under section 121, which requires the recommendation of the probation officer and of the District Attorney if the case was tried in the Superior Court, and of the probation officer with the concurrence of the judge if the case was tried in the Municipal Court. Of the latter there have been released 70 Superior Court cases, 35 Municipal Court cases, 19 South Boston Municipal Court cases, 5 Dorchester Municipal Court cases, 2 East Boston Municipal Court cases, 5 Chelsea Police Court cases, 8 Charlestown Municipal Court cases, 2 Brighton Municipal Court cases, 3 West Roxbury Municipal Court cases, 5 Roxbury Municipal Court cases. In addition to the above there have been 79 released from the Suffolk County

Jail, making a total of releases on a permit to be at liberty by this department of 1,303.

It is pleasing to note that of the cases released on a permit to be at liberty it has become necessary to revoke the permit of only 45 men. We have been greatly assisted in our work by the Rev. William R. Cowardin, S. J., and Rev. George E. Stokes, Catholic and Protestant chaplains, respectively, and Aaron Gorovitz, the Jewish chaplain.

The buildings at Deer Island, considering the age of many of them and the exposure to severe weather of all of them, are in very good condition.

On January 3, 1914, a fire occurred, completely destroying the old laundry building, which was of wood and of small value; in fact the building I had intended to remove and in its place erect a coal pocket. The machinery, which was valued at more than \$10,000, was also totally destroyed.

During the year the old prison building, formerly occupied by women, had been remodeled for laundry purposes. The flooring, sewer and water connections, in fact everything, was prepared to receive the new machinery which was needed and it was intended to have used that which was destroyed by fire.

In addition to the loss entailed by the fire the department will be put to several thousand dollars expense because of delay in procuring new machinery.

When all of this machinery is in place we will have an up-to-date plant; one where we can do laundry work for other departments if called upon to do so.

In many previous reports of this department recommendation has been made to establish a central heating and power plant.

Reports from the inspectors of the state now show that six of our fourteen boilers have been condemned or have been so reduced in pressure allowed as to be practically useless. It seems to me that it would be good financial policy to at once start what may be ultimately an economical central heating plant.

My idea would be to erect a building of concrete or brick, not expensive, and in a proper location, so that all of our different buildings could be supplied with steam at a minimum cost, this building to be so planned and constructed that additions could be made from time to time in the future as occasion requires and so not have the expense fall all in any one year.

The only other recommendation I have to make for a new building or addition to our plant is for a small concrete or brick building, properly arranged, to accommodate those who are committed for or found to be addicted to the use of drugs.

During the year the steamer "Monitor" has carried 110,240 passengers to and from the institutions in the harbor, as well as to Bumpkin Island on account of the Randidge Trust Fund Excursions, without accident to any person or to the boat.

Your attention is called to extracts of the report of the master of the House of Correction, those of the resident physician and the chaplains of the institution, which are appended and respectfully made a part of this report.

Any success which has been attained in the administration of the department is largely due to the loyal support of the employees.

Respectfully submitted,

FRED S. GORE,
Penal Institutions Commissioner.

SUFFOLK COUNTY HOUSE OF CORRECTION.

DEER ISLAND, BOSTON, February 2, 1914.

MR. FRED S. GORE,

Penal Institutions Commissioner:

MY DEAR SIR,— In submitting to you my annual report for the past year I wish to thank you personally, and your office staff generally, for the genial courtesies which you have invariably extended to me.

In compliance with the Uniform Desertion Act, which compels payment to the wife or minor children of the sum of fifty cents a day for each day's hard labor performed by the husband or father, there has been disbursed by the county \$9,166.25.

The school for illiterates has had a most successful year; at the present time there are fifty pupils of several nationalities, Italians predominating; there are also Russians, Germans, Portuguese, a Greek and a few Polanders. Most of these pupils were markedly illiterate when enrolled in their course of study, but with few exceptions they are studious and seem anxious to learn the English language. They are, of course, heavily handicapped in this by their national linguistic utterance, but by perseverance and attention they fast master a smattering of reading and writing in English. The mission of this institution school is an excellent one, if only in the fact that it assists foreigners to a better comprehension of affairs in this the land of their adoption. I would advise the recataloguing of the books in the prison library; this should be given your early attention, as there are a great many books that might be of great assistance to many of the inmates and employees who have now no way of knowing what our library contains in the way of reading matter and in books of reference.

The sea wall back of the power house that was built a few years ago begins to show wear, and unless repairs are soon made it will be undermined; we might be able to save it by dumping heavy pieces of condemned granite in front of the wall and in that way changing the wash and smashing power of the waves, or piles

might be driven that would cause the current to deposit sand along the front of the wall, which would protect it as much as granite.

In a report submitted to you before, I suggested that a sea wall be constructed on the westerly side of the island, from the wharf to the gut, foundation to be placed at about low water mark, and that dredges and scows be allowed to dump their refuse in back of the wall so constructed; this in time would give us a largely increased acreage for our farm and give employment to many of our inmates besides protecting the island from serious inroads of the sea. I would again suggest that surveys and estimates as to the cost of construction be taken up.

I would respectfully advise the building of a cold storage plant of sufficient capacity to supply the institution with ice and to preserve our food during the hot months.

Money will soon be needed for the construction or the rebuilding of our bakery. The same methods that were in vogue thirty years ago are in vogue now, and as compared with others ours is in a class by itself, and considering its great importance in the general health and well-being of the inmates its present condition should be improved.

Three employees of the institution have died during the past year: Rev. Louis A. Alexander, Cornelius Shaughnessy and John S. Concannon, three men who in their different lines of work did their best, and who always had the interest of the institution at heart.

Out of the large number of commitments to this institution during the past year but ten have died; this is a remarkable fact when one takes into account the condition of many when first admitted, and speaks volumes for the care and attention to duty of the nurses and physicians. I doubt that there is another hospital in the United States of the same character that can show as low a death rate as this.

I would respectfully suggest that the old straw shed which is not now in use be made over into a bowling alley for the use of the officers and matrons; all labor could be supplied from here and the only expense would be for the material.

Respectfully yours,

JAMES H. CRONIN, *Master*.

VALUATION OF BUILDINGS.

Bakery	\$13,000 00
Blacksmith shop	500 00
Bull barn	5,000 00
Boat and ferry house	1,700 00
Cow barn	3,000 00
Coal sheds	4,500 00
Deputy master's house	7,500 00
Farmhouse	5,000 00
Greenhouse	1,500 00
Morgue	500 00
Women's old prison and laundry	25,000 00
Receiving house	12,000 00
School building	4,000 00
Straw shed and old hennerly	300 00
Wagon and tool house	4,000 00
Ice house	1,000 00
Hospital	\$63,000 00
Machinery	4,500 00
	67,500 00
Mechanics' shops	10,000 00
Piggery	22,800 00
Hennerly	400 00
Power house	\$10,000 00
Machinery	19,000 00
	29,000 00
Pumping station	2,200 00
Prison, men's:	
Central and boiler house	\$274,000 00
Machinery	9,500 00
	283,500 00
North prison	114,000 00
Women's prison:	
Building	\$380,000 00
Machinery	7,500 00
	387,500 00
Women's old prison and new laundry	25,000 00
	<u>\$1,030,400 00</u>

STOCK ON HAND.

Agriculture	\$13,710 60
Bakery	957 50
Boat house	185 00
Butcher shop	660 00
Carpenter's shop	1,039 46
Clothing (male)	4,528 42
Carried forward	\$21,080 98

<i>Brought forward</i>	\$21,080 98
Clothing (female)	1,376 86
Engineer's department	8,162 00
General care (officers)	4,426 99
General care (inmates)	7,176 51
Hennery	198 50
Hospital dispensary and operating room	450 00
Hospital (inmates)	1,200 00
Hospital officers	1,050 00
Library and printing	854 60
Paint and upholstering shop	1,469 97
Piggery	3,916 00
Religious services	1,200 00
Sewing room (male)	3,720 30
Sewing room (female)	504 40
Shoe department	318 53
Store	5,490 13
	\$62,595 77

INVENTORY OF INDUSTRIES.

Clothing. (Materials.)

Trimnings	\$818 97
Uncut goods, 5,647 $\frac{1}{4}$ yards	415 08
Overalls, 304 dozen, J. B. P. Co.	562 40
	\$1,796 45

Tools and Implements.

Tools and implements	1,036 10
--------------------------------	----------

Stone. (Materials.)

Edgestone, 3,215 $\frac{5}{8}$ feet	\$2,250 79
Large curb corners, 7	42 00
Small curb corners, 85	306 00
Rough stock, 8,226 $\frac{1}{2}$ feet	3,002 67
	5,601 46

Tools and Implements.

Tools and implements	1,610 47
	\$10,044 48

Farm Products for Past Year.

Apples, 40 barrels	\$80 00
Asparagus, 300 bunches	30 00
Bush beans, 75 bushels	75 00
Lima beans, 25 bushels	25 00
Mangle beets, 80 tons	1,600 00
<i>Carried forward</i>	\$1,810 00

<i>Brought forward</i>	\$1,810 00
Table beets, 600 bushels	300 00
Cabbage, 50,000 heads	500 00
Carrots, 600 bushels	150 00
Celery, 4,000 bunches	400 00
Corn fodder, 50 tons	1,000 00
Cucumbers, 75 bushels	37 50
Currants, 24 baskets	2 40
Ensilage, 175 tons	3,500 00
Grapes, 2 bushels	1 00
Dandelions, 150 bushels	15 00
Ice, 400 tons	1,200 00
Hay, 75 tons	1,500 00
Lettuce, 1,000 heads	50 00
Manure, 100 cords	200 00
Oat fodder, 5 tons	125 00
Onions, 500 bushels	500 00
Parsley, 500 bunches	10 00
Pears, 15 bushels	15 00
Peas, 75 bushels	75 00
Peppers, 1 bushel	1 00
Pumpkins, 3 tons	45 00
Radishes, 200 bunches	10 00
Raspberries, 36 boxes	3 60
Strawberries, 200 boxes	20 00
Hubbard squash, 2 tons	30 00
Turban squash, 2 tons	30 00
Tomatoes, 3,000 bushels	750 00
Turnips, 1,600 bushels	400 00
Sweet corn, 100 bushels	50 00
Summer squash, 75 bushels	18 75
Rhubarb, 2 tons	40 00
Swiss chard, 25 bushels	12 50
Parsnips, 500 bushels	250 00
Cauliflower, 110 heads	11 00
Rye fodder, 15 tons	300 00
Milk, 215,499 pounds	8,619 96
	\$21,982 71

Men's Sewing Room.

List of clothing made in the men's sewing room for institution use:

1,423 coats	\$1,067 25
1,029 vests	257 25
2,705 pants	1,352 50
202 dozen drawers	404 00
<i>Carried forward</i>	\$3,081 00

<i>Brought forward</i>	\$3,081 00
223 dozen overalls	669 00
230 dozen woolen shirts	460 00
213 dozen cotton shirts	322 50
265 bed ticks	132 50
115 pillow slips	13 80
213 dozen suspenders	21 30
20 waiters' coats	5 00
2 dozen jumpers	6 00
97 women's coats	194 00
24 pairs mittens	2 40
3 overcoats	6 00
	\$6,913 50

Women's Sewing Room.

List of articles made in women's sewing room during past year for institution use:

624 aprons	\$62 40
160 table cloths	160 00
50 bureau covers	5 00
50 commode covers	2 50
75 laundry bags	3 75
48 mangle covers	48 00
75 coffee bags	3 75
100 plaid spreads	50 00
1,430 sheets	356 00
1,205 pillow slips	144 60
4,325 towels	216 25
565 roller towels	39 55
275 napkins	27 50
215 plaid dresses	107 50
410 check dresses	205 00
425 chemises	42 50
800 pairs drawers	80 00
150 skirts	22 50
337 shirt waists	33 70
150 suits	75 00
130 petticoats	32 50
	\$1,718 00

Male Prisoners.

The following is a list of clothing given to male prisoners upon their discharge from this institution:

36 overcoats	\$72 00
174 coats	130 50
220 pairs pants	110 00
192 vests	48 00
215 pairs shoes	333 25
1,970 pairs socks	98 50
248 hats	124 00
80 caps	40 00
730 shirts	55 25
1,063 pairs drawers	175 39
74 pairs overalls	18 50
	<u>\$1,205 39</u>

Female Prisoners.

The following is a list of clothing given to discharged female prisoners upon their release from this institution:

354 shirt waists	\$35 40
125 shirt waist suits	62 50
100 dress skirts	15 00
136 petticoats	34 00
192 chemises	19 20
475 pairs drawers	47 50
515 pairs stockings	51 50
36 pairs shoes	36 00
163 hats	81 50
72 aprons	7 20
	<u>\$389 80</u>

REPORT OF PIGGERY AND HENNERY.

Pigs sold, 143	\$394 75
Pigs killed, 88, 31,900 pounds	3,636 75
Soft soap, 67,070 gallons	670 70
Grease rendered, 12,326 pounds	639 56
	\$5,341 76
Cost lime, soda, wages, etc.	925 11
	<u>\$4,416 65</u>

<i>Stock on Hand.</i>	
200 head	\$3,916 00
93 fowl killed	\$116 25
25 chickens killed	25 00
930 $\frac{1}{2}$ dozen eggs	322 69
	\$463 94
Cost feed, etc.	247 73
	\$216 21
<i>Stock on Hand.</i>	
149 birds	\$198 50

In the stone department of the industries we have cut 20,892 $\frac{8}{12}$ feet of edgestone, 255 small curb corners and 19 large curb corners, with a valuation of \$15,656.87.

We have shipped from this department during the year 20,751 $\frac{2}{12}$ feet of edgestone, 247 small curb corners and 63 large curb corners, valued at \$15,793.02.

We have on hand in the stone yard 3,215 $\frac{5}{12}$ feet of edgestone, 85 small curb corners and 7 large curb corners, valued at \$2,598.79. There are 8,226 $\frac{1}{2}$ feet of rough stock on hand, valued at \$3,002.67. The value of the tools and implements in the stone yard is \$1,610.47.

We have manufactured in the clothing branch of the industries 2,102 $\frac{5}{12}$ dozens of overalls.

The stock on hand in this department amounts to \$1,796.45, and the tools and implements are worth \$1,036.10.

Table Showing Amount of Fines Paid to City Collector for Year Ending January 31, 1914.

February.....	\$168 00
March.....	410 00
April.....	294 00
May.....	348 00
June.....	315 00
July.....	335 00
August.....	220 00
September.....	285 00
October.....	245 00
November.....	323 00
December.....	241 00
January.....	220 00
	\$3,404 00

Table Showing Courts from Which Committed.

	Males.	Females.	Total.
Central Court.....	2,363	546	2,909
Roxbury District Court.....	265	31	296
South Boston District Court.....	1,113	62	1,175
Charlestown District Court.....	692	39	731
Chelsea Police Court.....	470	20	490
* Superior Criminal Court.....	475	25	500
Dorchester District Court.....	266	.....	266
East Boston District Court.....	207	4	211
Brighton District Court.....	275	5	280
West Roxbury District Court.....	381	8	389
Transferred from Temporary Industrial Camp.....	24	.....	24
Penal Commissioners, Permit Revoked.....	44	1	45
Prison Commissioners, Permit Revoked.....	3	2	5
Transferred from Massachusetts Reformatory.....	2	.....	2
Transferred from State Farm.....	6	12	18
Returned from escape.....	1	.....	1
Transferred from Suffolk County Jail.....	7	.....	7
Transferred from Middlesex County House of Correction.....	3	.....	3
	6,597	755	7,352

Table Showing Maximum Daily Population.

	Males.	Females.	Total.
February.....	949	114	1,063
March.....	1,005	123	1,128
April.....	1,035	116	1,151
May.....	982	137	1,119
June.....	944	124	1,068
July.....	926	106	1,032
August.....	988	138	1,126
September.....	945	134	1,079
October.....	934	131	1,065
November.....	933	130	1,063
December.....	898	124	1,022
January.....	954	106	1,060

Table Showing Minimum Daily Population.

	Males.	Females.	Total.
February.....	905	125	1,030
March.....	925	114	1,039
April.....	960	119	1,079
May.....	913	120	1,033
June.....	861	130	991
July.....	878	106	934
August.....	880	134	1,014
September.....	864	114	978
October.....	883	138	1,021
November.....	858	116	974
December.....	817	115	932
January.....	863	109	972

Table Showing Average Daily Population.

	Males.	Females.	Total.
February.....	920	124	1,044
March.....	963	117	1,080
April.....	994	121	1,116
May.....	944	125	1,070
June.....	887	126	1,014
July.....	868	111	979
August.....	935	133	1,068
September.....	882	124	1,007
October.....	902	137	1,039
November.....	894	118	1,013
December.....	870	116	986
January.....	928	102	1,030
			12,446
Daily average for year.....			1,037

Table Showing Number Committed Each Month.

	Males.	Females.	Total.
February.....	475	55	530
March.....	635	43	678
April.....	627	75	702
May.....	594	61	655
June.....	504	78	582
July.....	537	59	596
August.....	624	87	711
September.....	522	78	600
October.....	528	58	586
November.....	474	47	521
December.....	524	57	581
January.....	553	57	610
	6,597	755	7,352

Table Showing Number Discharged Each Month.

	Males.	Females.	Total.
February.....	458	65	523
March.....	563	41	604
April.....	636	60	696
May.....	664	78	742
June.....	540	71	611
July.....	534	64	598
August.....	607	92	699
September.....	509	54	563
October.....	504	69	573
November.....	538	73	611
December.....	534	54	588
January.....	466	68	534
	6,553	789	7,342

Table Showing How Discharged.

	Males.	Females.	Total.
Expired sentences.....	4,789	690	5,479
Expired sentence and fine paid.....	10	.....	10
Permit commissioner.....	1,156	68	1,224
Fines paid.....	290	8	298
Order of court.....	25	3	28
Pardon by Governor.....	18	.....	18
Permit Prison Commissioners.....	4	.....	4
Permit State Board of Charity.....	2	19	21
Transferred to Temporary Independent Camp and Hospital.....	190	.....	190
Transferred to Massachusetts Reformatory.....	32	.....	32
Transferred to Insane Hospital.....	9	.....	9
Transferred to Suffolk County Jail.....	9	.....	9
Order of court, fine paid.....	1	.....	1
Order of court to State Prison.....	2	.....	2
Died.....	10	.....	10
Transferred to Middlesex County House of Correction	3	.....	3
Fine paid and permit commissioner.....	2	.....	2
Transferred to Boston Infirmary.....	.....	1	1
Escaped.....	1	.....	1
	6,553	789	7,342

Table Showing Daily Average Number Committed Each Month.

	Males.	Females.	Total.
February.....	20	2	23
March.....	24	1	26
April.....	25	2	28
May.....	25	3	28
June.....	20	3	23
July.....	19	2	22
August.....	24	3	27
September.....	20	3	23
October.....	20	2	22
November.....	22	3	25
December.....	20	2	22
January.....	33	2	35

Table Showing Daily Average Number Discharged Each Month.

	Males.	Females.	Total.
February.....	19	2	22
March.....	21	1	23
April.....	24	2	26
May.....	25	3	28
June.....	21	2	24
July.....	19	2	22
August.....	23	3	26
September.....	19	2	21
October.....	19	2	21
November.....	22	3	25
December.....	20	2	22
January.....	17	2	19

Number of Times Persons Committed During the Year Have Been Committed to this House of Correction.

	Males.	Females.	Total.
First.....	2,728	364	3,092
Second.....	840	112	952
Third.....	565	66	631
Fourth.....	420	56	476
Fifth.....	274	18	292
Sixth.....	239	23	262
Seventh.....	199	17	216
Eighth.....	151	9	160
Ninth.....	130	13	143
Tenth.....	121	10	131
Eleventh.....	97	5	102
Twelfth.....	94	7	101
Thirteenth.....	67	4	71
Fourteenth to eighty-fifth, inclusive.....	672	51	723
	6,597	755	7,352

Ages of Those Committed.

	Males.	Females.	Total.
Under twenty years.....	264	8	272
20 to 29 years, inclusive.....	1,517	122	1,639
30 to 39 " ".....	1,907	249	2,156
40 to 49 " ".....	1,730	231	1,961
50 to 59 " ".....	862	91	953
60 to 69 " ".....	291	48	339
70 to 79 " ".....	20	5	25
80 to 89 " ".....	6	1	7
	6,597	755	7,352

Color of Those Committed.

	Males.	Females.	Total.
White.....	6,446	730	7,176
Black.....	150	25	175
Red.....	1	.....	1
	6,597	755	7,352

Education of Those Committed.

	Males.	Females.	Total.
Read and write.....	6,026	678	6,704
Read only.....	7	4	11
Neither read nor write.....	564	73	637
	6,597	755	7,352

Social Relations of Those Committed.

	Males.	Females.	Total.
Married.....	1,719	355	2,074
Single.....	4,878	400	5,278
	6,597	755	7,352

Nativity of Those Committed.

	Males.	Females.	Total.
Massachusetts.....	2,601	159	2,760
United States, other than Massachusetts.....	852	85	937
Foreign.....	3,144	511	3,655
	6,597	755	7,352

Table Showing Offences for Which Committed.

AGAINST PUBLIC ORDER.	Males.	Females.	Total.
Adultery.....	13	4	17
Attempt rescue.....	4	.....	4
Common drunkard.....	2	1	3
Common nightwalker.....	1	36	37
Vagabond.....	6	1	7
Vagrant.....	70	2	72
Carrying concealed weapons.....	30	.....	30
Committing unnatural act.....	5	2	7
Cruelty to animals.....	2	.....	2
Disturbing the peace.....	7	2	9
Drunkenness.....	4,457	565	5,022
Fornication.....	27	37	64
Gaming.....	11	.....	11
Idle and disorderly.....	63	26	89
Indecent exposure.....	12	.....	12
Keeping disorderly house.....	8	7	15
Lewd and lascivious cohabitation.....	46	28	74
Maintaining liquor nuisance.....	2	3	5
Nonsupport.....	240	3	243
<i>Carried forward.....</i>	5,006	717	5,723

Table Showing Offences for Which Committed.—*Continued.*

AGAINST PUBLIC ORDER.	Males.	Females.	Total.
<i>Brought forward</i>	5,006	717	5,723
Operating auto while under the influence of intoxicating liquor.....	1	.....	1
Polygamy.....	5	.....	5
Unlawful selling intoxicating liquors.....	.....	1	1
Profanity.....	7	.....	7
Lewdness.....	1	.....	1
Keeping house of ill fame.....	3	1	4
Violating city ordinance.....	15	.....	15
Violating park rules.....	10	.....	10
Walking railroad track.....	72	.....	72
Breaking glass.....	27	.....	27
Conspiracy.....	5	.....	5
Making false alarm of fire.....	1	.....	1
Common railer and brawler.....	1	2	3
Abortion.....	2	.....	2
Evading car fare.....	3	.....	3
Riding freight car.....	75	.....	75
Making an affray.....	4	.....	4
Peddling without license.....	1	.....	1
Deriving support from the earnings of a prostitute..	11	1	12
Unlawfully delivering morphine.....	8	1	9
Present where drugs were found.....	1	.....	1
Keeping unlicensed dog.....	1	.....	1
Throwing missiles.....	2	.....	2
Unlawfully having morphine in possession.....	39	4	43
Stubborn child.....	3	1	4
Setting up a lottery.....	3	.....	3
Possession burglarious tools.....	1	.....	1
Attempt to vote under name of another.....	1	.....	1
Violating automobile law.....	2	.....	2
Abduction.....	1	.....	1
Fraudulently obtaining entertainment at inn.....	1	.....	1
Obscenity.....	2	.....	2
Having in possession obscene prints.....	3	.....	3
Perjury.....	1	.....	1
Sodomy.....	2	.....	2
Desertion.....	1	.....	1
Making bonfire.....	1	.....	1
	5,323	728	6,051

Table Showing Offences for Which Committed.— *Concluded.*

AGAINST PERSON.	Males.	Females.	Total.
Abuse female child.....	3		3
Assault and battery.....	174		174
Assault.....	14		14
Assault and battery on officer.....	17	2	19
Assault and battery with dangerous weapon.....	45		45
Attempt larceny from person.....	11		11
Indecent assault.....	12		12
Robbery.....	12		12
Threats.....	4		4
Larceny from person.....	50	3	53
Assault to murder.....	4		4
Assault to rob.....	3		3
	349	5	354
AGAINST PROPERTY.			
Larceny from common carrier.....	8		8
Larceny in building.....	15		15
Attempt larceny.....	17		17
Larceny from realty.....	4		4
Breaking and entering.....	73		73
Forgery.....	19		19
Larceny.....	491	22	513
Malicious injury to property.....	9		9
Receiving stolen goods.....	12		12
Trespass.....	257		257
Unlawful appropriation.....	11		11
Embezzlement.....	1		1
Concealing mortgage property.....	1		1
Attempt to break and enter.....	5		5
Sinking a vessel.....	2		2
	925	22	947

Record of Punishments.

	Males.	Females.	Total.
February.....	30	5	35
March.....	24	1	25
April.....	24	5	29
May.....	32	2	34
June.....	34	2	36
July.....	52	5	57
August.....	45	5	50
September.....	41		41
October.....	31	4	35
November.....	41	4	45
December.....	23		23
January.....	29		29
	406	33	439

REPORT OF RESIDENT PHYSICIAN.

February 2, 1914.

MR. JAMES H. CRONIN,

Master House of Correction, Deer Island:

DEAR SIR,—I respectfully submit herewith the annual report of the Deer Island Hospital for the year ending January 31, 1914.

HOUSE OF CORRECTION HOSPITAL.

Patients in hospital January 31, 1913	41	
Admitted:		
Males	629	
Females	87	
	—	716
Total		<u>757</u>
Discharged:		
Males	582	
Females	80	
	—	662
Died:		
Males	9	
Females	0	
	—	9
To Insane Hospital:		
Males	8	
Females	1	
	—	9
To Long Island:		
Males	2	
Females	1	
	—	3
To Rutland Tubercular Hospital:		
Males (only)	17	
	—	17
Patients in Hospital January 31, 1914	57	
	—	57
Total		<u>757</u>
Largest number in hospital at one time		63
Smallest number in hospital at one time		39
Daily average		56

OVERTIME HOSPITAL.

Patients in hospital January 31, 1913	9
Admitted:	
Males	28
Females	2
	30
Total	39
Discharged:	
Males	25
Females	6
Died	1
Insane	3
	35
Patients in hospital January 31, 1914	4
Total	39
Largest number in hospital at one time	9
Smallest number in hospital at one time	1
Daily average	5

RECAPITULATION.

Patients in hospital January 31, 1913:	
House of Correction	41
Overtime	9
	50
Admitted:	
House of Correction	716
Overtime	30
	746
Total	796
Discharged:	
House of Correction	700
Overtime	35
	735
Remaining in hospital January 31, 1914:	
House of Correction	57
Overtime	4
	61
Total	796

The out-patient department was well patronized the past year, 26,571 patients from the women's and men's prisons having been treated.

There were 12 cases of atropine poisoning admitted on one day; all were addicted to the use of drugs and had taken an injection of what they thought was morphine; fortunately there were no deaths.

Nine children were admitted with their mothers, who were sentenced by the court.

Of the 716 patients admitted only 10 have died, showing a remarkably low death rate when you consider the condition of the patients upon admission. In addition, two officers died; one of cerebral hemorrhage and the other of lobar pneumonia.

A tubercular patient, whom we sent to the prison camp at West Rutland, was returned to us as a stretcher case, having developed some stomach trouble. He is now much improved and able to walk about the wards of the hospital.

Again I will ask for the installation of an X-ray. We need one because of the variety of cases we are called upon to treat. During the year there were several probable fractures that called for an X-ray examination, but we were unable to give it. In one instance a patient was taken to Long Island for examination, and returned on the same day.

The heating apparatus is not sufficient to keep the male wards comfortable when a strong northwest wind is blowing. Storm windows, I think, would help in keeping the wards warm. Shower baths should be installed in the several wards of the male wing.

The wash sink in the operating room could be fitted out with pedal faucets at a small cost to the institution, and a great convenience to the surgeon.

Edward J. Fitzgibbon, M. D., was appointed Assistant Physician January 15, 1914. Drs. Francis X. Crawford and John T. Sullivan are also associated with me in attending to the sick.

Thanking you for past favors, I am,

Yours respectfully,

BERNARD F. MCGAFFIGAN,
Resident Physician.

REPORT OF THE PROTESTANT CHAPLAIN.

February 2, 1914.

To JAMES H. CRONIN,

Master of the House of Correction:

DEAR SIR,—I have pleasure in responding to your request for a report of my work for the past year.

Services have been held each Sunday for men and women in their respective chapels. The attendance and interest have been well sustained. The choirs, composed of inmates under the direction of our organist, Miss Baker, have rendered music chiefly of a simple character, such as the majority of our attendants can appreciate.

During the year I have held over one thousand private interviews with prisoners, and made approximately fifty visits to the homes of prisoners or ex-prisoners in cases in which I believed such a visit would result in good.

As in other years a large number of persons have taken the pledge of total abstinence, some for a limited period, for probation purposes, and a less number for an indefinite period. To my knowledge some at least are true to their promise and consequently doing well.

It is furthest from my thought to attempt to instruct the authorities on institution management, yet as one whose duties are concerned with the moral and spiritual interests of our wards I feel free here to express my sympathy with the proposal for "segregation," and would refer any who feel an interest in what I would say to my report of last year as an adequate expression of my views on this subject, and since writing that report I have found no reason to revise or modify the position then taken on the subject of intemperance and its treatment. It is therefore unnecessary to repeat what I then said.

Competent investigators tell us that the use of cocaine, morphine, heroin and other drugs is increasing to an appalling extent and many victims of the "drug habit" find their way to our own and all other penal institutions. The necessity of segregating this class of persons

seems imperative in view of the irrepressible desire they manifest to induce others to experiment with the deadly thing; thus the ranks of the "drug-users" are recruited and the recruits soon deteriorate into physical wrecks and moral degenerates. In the meantime we may, I believe, rejoice that stringent state and federal legislation, suppressive of agents who ply their traffic in these deadly poisons, making thousands of physical and moral wrecks, is imminent. "Men of thought and men of action, clear the way!"

I recognize with pleasure the sympathy and cooperation of Commissioner Fred S. Gore and Assistant Commissioner Dennis D. Driscoll in my work; and I further thank you, Mr Cronin, and your deputy, Mr Hendry, for many personal and official courtesies.

Yours very respectfully,

GEORGE E. STOKES.

REPORT OF THE CATHOLIC CHAPLAIN.

February 2, 1914.

MR. JAMES H. CRONIN, *Master*:

DEAR SIR,—I herein submit my annual report for 1913.

Mass was regularly celebrated on Sundays and holydays of obligation for the men and women in their separate chapels. Benediction of the Blessed Sacrament was also given at the appointed times. At the mass there always was a sermon on the gospel of the day, or on some other religious topic.

These services were well attended in both chapels and the average attendance was larger than last year. The respectful attention shown by the prisoners was, and has been before, very marked. Men have come to me to express gratification and to thank me for help given them during these exercises.

With such evidence may we not hope that good is being done? It certainly is a source of comfort to the man whose duty it is to try to teach them to know themselves and their duty to God and to fellow man.

During the year instructions were given to those who desired to enter the church, as also to those who needed further preparation for the proper reception of the sacraments. The number going to confession and receiving holy communion was about the same as last year.

The calls to the hospital, for ministering to the sick and preparing some of them for death, increased in number.

In dealing with the unfortunates addicted to drink — and there are many of them — we urge them to take the pledge of total abstinence from alcoholic drinks, hoping, thereby, to get them back to a normal physical condition and a stronger will power, which alone, it seems, will make a reform possible. Some, we are glad to say, come of their own volition to take this pledge and these give us greater reason to look for good results. We know, however, that good is done in both classes, and this encourages us to continue this work.

Interviews with the prisoners were frequent, and gave us opportunity to help individuals both spiritually and materially. It also put us in touch with conditions outside the prison that needed looking after. This entailed a great deal of work, and any success attained was due in great measure to the earnest cooperation of the assistant commissioner and his staff of workers. Pastors of several city churches and the St. Vincent de Paul Society were also very helpful in this outside work. Both clothing and money were contributed by friends whenever I appealed for aid. I feel convinced that this special work in the hands of a "Prisoners' Aid Society," cooperating with the assistant commissioner and the chaplains at Deer Island, would do much to help the prisoners desirous of reform after the expiration of the term of their sentence.

In concluding, I must again express to you, the deputy, the officers, and indeed to all at Deer Island, my sincere gratitude for the continued kindness and consideration extended me at all times. And, further, permit me to express a like feeling of gratitude to the commissioner and the assistant commissioner for their uniform kindness to me since my appointment as chaplain.

Believe me, sir, with great respect,

Yours,

W. R. COWARDIN, S. J.,
Catholic Chaplain.



ANNUAL REPORT
OF THE
PRINTING DEPARTMENT

FOR THE
FINANCIAL YEAR ENDING JANUARY 31, 1914.

BOSTON, February 2, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

DEAR SIR,— In accordance with the requirements of chapter 3, section 24, of the Revised Ordinances of 1898, I respectfully submit herewith a detailed report of the business of the Printing Department for the year beginning February 1, 1913, and ending January 31, 1914.

A profit of \$34,610.88 was realized on the year's business, which, exclusive of postage account, amounted to \$194,286.25.

As a result of recent years' successful operation, the department accumulated cash profits amounting to nearly \$126,000. This showing was not made by additional expense to the city, as the average actual cost of printing for the past six years has been no greater than it was when done by contract twenty years ago, although since that time the cost of labor has increased about 75 per cent, the cost of material advanced accord-

ingly, and the quantity of printing required by the city during recent years is considerably greater.

During the latter part of the year 1913, \$93,000 was taken from our earnings and transferred to other departments for various municipal purposes (see page 6 of report), leaving a balance of \$32,440.64 as a working capital.

The plant is in such excellent condition that comparatively slight expenditures will be required for its upkeep during the coming year.

Respectfully submitted,

WILLIAM J. CASEY,
Superintendent of Printing.

FINANCIAL STATEMENT.

The following is a statement of the operating expenses of the Printing Department and expenditures of appropriation for City Documents, from February 1, 1913, to February 1, 1914:

PRINTING DEPARTMENT.

Balance on hand February 1, 1913			\$107,559 75
Revenue from printing, postage and waste, uncollected February 1, 1913			25,147 93
DEPARTMENT.	Printing.	Postage.	
Art	\$11 50		
Assessing	4,649 43	\$189 50	
Auditing	256 91	369 90	
Bath	29 52		
Boston and Cambridge Bridges, ...	9 56		
Building	2,221 43	468 22	
Board of Appeal	11 51	20 00	
Cemetery	497 84	153 00	
City Clerk	248 91	120 06	
City Council, Incidental Ex- penses	1,762 06		
City Messenger	33 62	112 56	
Clerk of Committees	59 95	36 00	
City Council Proceedings	4,402 12		
City Documents	36,008 60		
City Record	5,627 13	667 75	
Collecting	3,427 93	4,412 00	
Consumptives' Hospital	838 18	251 08	
Election	20,730 04	886 89	
Finance Commission	39 70	22 00	
Fire	3,401 39	107 00	
Health	5,471 64	3,496 53	
Hospital	6,089 46	800 47	
Institutions:			
Boston Infirmary:			
Charlestown Almshouse	26 51	10 00	
Long Island Almshouse and Hospital	1,390 69	271 90	
Office	344 21	82 30	
Penal Institutions:			
Deer Island	283 37	215 33	
Office	260 77	118 12	
Trustees for Children:			
Parental School	118 92	96 00	
Placing Out and Office Ex- penses	117 13	322 79	
Institutions Registration	297 54	60 53	
Law	215 49	80 00	
Carried forward	\$98,883 06	\$13,369 93	\$132,707 68

DEPARTMENT.	Printing.	Postage.	
<i>Brought forward</i>	\$98,883 06	\$13,369 93	\$132,707 68
Library	266 86	182 25	
Licensing Board	322 86		
Market	81 25	11 00	
Mayor	747 29	578 78	
Information Bureau	23 15		
Public Celebrations	690 74	284 46	
Municipal Athletic Association	273 51	39 06	
Music	239 06	20 00	
Overseeing of Poor	451 36	172 00	
Park	116 75	306 51	
Park and Recreation	4,409 01	686 02	
Police	5,587 50		
House of Detention	48 19		
Police Registration	13,953 18		
Signal Service	339 55		
Public Buildings	1,318 90	133 70	
Public Grounds	11 63	11 25	
Public Works:			
Central Office	2,706 40	254 96	
Bridge Service	599 72	135 88	
Ferry Service	1,550 89	2 00	
Lighting Service	66 33	40 00	
Paving Service	2,640 39	510 10	
Sanitary Service	1,877 79	149 86	
Street Cleaning and Oiling			
Service	996 10	182 24	
Sewer Service	1,659 84	373 26	
Water Service	3,759 13	345 59	
High Pressure Fire Service	262 45	8 00	
Registry	2,124 60	1,115 91	
School	8,043 75	2,445 20	
Schoolhouse	1,122 43	679 09	
Land and Buildings	834 22		
Sinking Funds	428 55		
Soldiers' Relief	117 04	60 12	
Statistics	3,250 02	58 00	
Street Laying-Out	804 73	165 00	
Supply	950 91	430 00	
Treasury	455 07	20 00	
Public School Teachers' Retirement Fund	20 63		
Vessels and Ballast	21 15		
Weights and Measures	127 94	20 00	
Wire	1,639 00	140 00	
County of Suffolk:			
Juvenile Court	—	93 00	
Land Court	560 91		
Medical Examiner	8 50		
Miscellaneous	63 08	5 00	
Municipal Court, Jamaica Plain	131 04		
Probate Court of Insanity	32 20		
Probate Court of Insolvency	3,581 83		
Registry of Deeds	17 50		
Superior Criminal Court	951 70	181 00	
Meyer Bloomfield	8 16		
Mary T. Follett	7 48		
J. R. Haywood	2 14		
Jamaica Printing Company	7 50		
<i>Carried forward</i>	\$169,194 97	\$23,209 17	\$132,707 68

PRINTING DEPARTMENT.

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DEPARTMENT.	Printing.	Postage.	
<i>Brought forward</i>	\$169,194 97	\$23,209 17	\$132,707 68
John C. Kiley	27 21		
Library Bureau	25 00		
Municipal Service Association	35 04	26 62	
City of Newton	5 50		
Police Relief Association	36 27		
	\$169,323 99	\$23,235 79	192,559 78
Waste			54 97
Dross			158 04
Total receipts paid February 1, 1914			<u>\$325,480 47</u>

EXPENDITURES FROM FEBRUARY 1, 1913, TO FEBRUARY 1, 1914.

Accounts and pay roll unpaid February 1, 1913		\$13,294 89
Pay Roll:		
February	\$7,251 57	
March	7,171 67	
April	7,306 54	
May	10,001 97	
June	7,908 19	
July	8,358 36	
August	9,552 30	
September	7,961 00	
October	7,836 29	
November	9,831 46	
December	7,931 75	
January	9,913 06	
		\$101,024 16
Ruling, binding, etc.		18,904 84
Stock		18,033 91
Rent		4,125 00
Machine room expense		2,138 26
Power and lighting		1,941 36
Electros, engraving, etc.		1,894 90
Press room supplies		1,106 03
Metal		393 19
Cleaning offices, towels, soap, etc.		378 72
Outside printing		226 25
Car fares		211 65
Teaming		181 25
Telephone		163 22
Sundries, miscellaneous expenses		156 19
Repairs		124 88
Stationery		99 55
Water rates		70 16
Type expense		19 67
		151,193 19
Drafts for postage		28,000 00
		\$192,488 08

Additions to Plant.

Casting machines	\$6,575 00	
Composing room	952 45	
Furniture	24 30	
		7,551 75
Total expenditures paid to February 1, 1914		<u>\$200,039 83</u>

Total receipts paid February 1, 1914 (see page 5) . . .	\$325,480 47
Total expenditures paid February 1, 1914 (see page 5) . . .	200,039 83
Balance February 1, 1914	<u>\$125,440 64</u>

Transfers from the accumulated profits to other city departments for various municipal purposes:

OVERSEEING OF POOR DEPARTMENT:

Establishing pension fund for the aid of mothers with dependent children . . . \$40,000 00
(Vote of City Council, October 6, 1913.)

PUBLIC BUILDINGS DEPARTMENT:

Municipal Building, South Boston, for grading, fences and furnishings . . . 20,000 00
(Vote of City Council, October 6, 1913.)

PARK AND RECREATION DEPARTMENT:

Restoration of Charlesgate West Bridge . . . 5,000 00
(Vote of City Council, October 6, 1913.)

PARK AND RECREATION DEPARTMENT:

Additional appropriation for completing work of restoring Charlesgate West Bridge . . . 3,000 00
(Vote of City Council, November 10, 1913.)

PUBLIC WORKS DEPARTMENT:

To the Highway Division, by order of his Honor the Mayor 25,000 00
93,000 00

Balance unexpended February 1, 1914 \$32,440 64

APPROPRIATION FOR CITY DOCUMENTS.

Receipts.

Appropriation	\$36,000 00
Revised ordinances sold	9 00
	<u>\$36,009 00</u>

Expenditures.

Printing of City Documents to February 1, 1914	36,008 60
Balance unexpended February 1, 1914	<u>\$0 40</u>

SUMMARY OF RECEIPTS AND EXPENDITURES OF PRINTING DEPARTMENT,
FROM FEBRUARY 1, 1913, TO FEBRUARY 1, 1914, INCLUDING REVENUE
UNCOLLECTED AND EXPENDITURES NOT PAID.

Receipts.

Revenue from printing, postage, waste and dross paid to February 1, 1914 (see page 5)	\$192,772 79
Revenue uncollected as follows:	

DEPARTMENT.	Printing.	Postage.
Assessing	\$143 97	\$40 00
Auditing	92 58	
Art	4 65	
Building	502 51	132 12
Board of Appeal	9 55	
Cemetery	51 05	11 00
City Clerk	60 63	
Carried forward	<u>\$864 94</u>	<u>\$183 12</u>
		<u>\$192,772 79</u>

PRINTING DEPARTMENT.

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DEPARTMENT.	Printing.	Postage.	
<i>Brought forward</i>	\$864 94	\$183 12	\$192,772 79
City Council, Incidental Expenses, ...	263 54		
City Messenger	—	16 00	
Clerk of Committees	10 23	6 00	
City Council Proceedings	802 30		
City Record	1,052 41	117 50	
Collecting	297 18	1,103 00	
Consumptives' Hospital	166 64	20 50	
Election	238 01		
Finance Commission	787 56	10 00	
Fire	1,374 44	40 00	
Health	2,088 95	708 90	
Hospital	785 38	146 72	
Institutions:			
Boston Infirmary:			
Charlestown Almshouse	8 31		
Long Island Almshouse and Hospital		120 24	
Office	57 75	31 24	
Penal Institutions:			
Deer Island	12 16		
Office	76 91	40 00	
Trustees for Children:	4 41	30 03	
Parental School	—	45 50	
Placing-Out and Office Expenses	10 20	88 00	
Law	104 61	50 00	
Library	—	127 00	
Licensing Board	437 37		
Market	1 20		
Mayor	109 76	145 00	
Overseeing of Poor	251 43	40 00	
Park and Recreation	1,245 78	205 50	
Police	2,742 31		
House of Detention	6 01		
Signal Service	78 97		
Public Buildings	285 54	12 00	
Public Works:			
Central Office	353 10	115 00	
Bridge Service	113 71		
Ferry Service	562 76		
Lighting Service	25 12		
Paving Service	713 60	31 34	
Sanitary Service	154 61		
Street Cleaning and Oiling Service	37 51	42 44	
Sewer Service	648 46	42 80	
Water Service	912 21	71 50	
High Pressure Fire Service	470 88		
Registry	138 53		
School	3,185 73	655 90	
Schoolhouse	293 69	5 00	
Land and Buildings	1,792 26		
Soldiers' Relief	203 26	24 06	
Street Laying-Out	52 74	30 00	
Statistics	3 00		
Supply	125 19	394 48	
Treasury	12 13		
Weights and Measures	188 22		
Wire	12 00	20 00	
<i>Carried forward</i>	\$24,163 01	\$4,718 77	\$192,772 79

DEPARTMENT.	Printing.	Postage.	
<i>Brought forward</i> . . .	\$24,163 01	\$4,718 77	\$192,772 79
County of Suffolk:			
District Attorney . . .	16 66		
Juvenile Court . . .	—	30 00	
Land Court . . .	206 34		
Miscellaneous . . .	33 56		
Municipal Court, Jamaica Plain . . .	44 55		
Probate Court of Insanity . . .	40 46		
Probate Court of Insolvency . . .	63 09		
Superior Criminal Court . . .	376 52	10 00	
Municipal Service Association . . .	18 07	8 00	
	\$24,962 26	\$4,766 77	29,729 03
Waste . . .			57 69
Dross . . .			26 16
			\$222,585 67

Stock on hand and unfinished work to February 1, 1914, as follows:

Unfinished work . . .	\$3,383 22
Paper stock . . .	3,443 32
Metal . . .	2,794 98
Ink . . .	93 38

\$9,714 90

Stock on hand and unfinished work, February 1, 1913 . . .

8,285 23

Increase . . . 1,429 67

Total receipts . . . \$224,015 34

Expenditures.

Expenditures paid up to February 1, 1914 (see page 5) . \$151,193 19

Unpaid accounts to February 1, 1914, as follows:

Stock . . .	\$5,074 40
Ruling, binding, etc. . .	2,326 32
Rent . . .	825 00
Electros, engraving, etc. . .	599 38
Power and lighting . . .	505 14
Machine room expense . . .	252 60
Press room supplies . . .	163 01
Cleaning offices, towels, soap, etc. . .	64 79
Teaming . . .	59 80
Car fares . . .	36 80
Sundries, miscellaneous expenses . . .	33 28
Outside printing . . .	24 05
Water rates . . .	22 76
Stationery . . .	18 50
Telephone . . .	5 28
Type expense . . .	3 60

\$10,014 71

Postage purchased . . . 28,196 06

Accounts to profit and loss . . . 50

38,211 27

Total expenditures . . . \$189,404 46

PRINTING DEPARTMENT.

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Total receipts (see page 8)	\$224,015 34
Total expenditures (see page 8)	189,404 46
Gain on operation for year	<u>\$34,610 88</u>

PLANT.

Value of plant February 1, 1913	\$56,674 92
Additions to plant paid (see page 5)	7,551 75
Additions to plant not paid	33 37
	<u>\$64,260 04</u>
Less 10 per cent depreciation	6,426 00
Value of plant February 1, 1914	<u>\$57,834 04</u>

STATEMENT, FEBRUARY 1, 1914.

Assets.

Plant	\$57,834 04
Accounts receivable	29,812 88
Stock on hand	9,714 90
Cash on hand	492 57
Postage on hand	164 80
Balance unexpended February 1, 1914	32,440 64
	<u>\$130,459 83</u>

Liabilities.

Accounts payable	\$10,048 08
Capital	120,411 75
	<u>\$130,459 83</u>

STATIONERY SUPPLIES PURCHASED BY THE VARIOUS DEPARTMENTS FOR THE YEAR ENDING JANUARY 31, 1914.

DEPARTMENT.	Amount.
Assessing	\$4,300 81
Auditing	1,212 50
Bath	26 25
Building	354 46
Board of Appeal	12 45
Board of Examiners	17 25
Boston and Cambridge Bridges	4 75
Chelsea Bridge	5 50
Cemetery	142 51
City Record	2 75
City Clerk	607 37
Collecting	670 31
Consumptives' Hospital	273 94
City Council, Incidental Expenses	12 90
City Messenger	68 20
Committee on Claims	33 90
Clerk of Committees	15 10
Election	1,457 18
Fire	1,363 32
Finance Commission	265 74
Health	1,724 98
Hospital	1,937 51
Institutions:	
Boston Infirmary:	
Office	123 88
Long Island	156 38
Charlestown	7 81
Children's Institutions:	
Office	139 14
Parental School	23 61
Rainsford Island	34 29
Penal Institutions:	
Office	69 82
Deer Island	253 77
Institutions Registration	68 05
Law	223 63
Land and Buildings, Refuse Station	6 51
Market	1 60
Overseeing of Poor	88 15
Park and Recreation	1,167 19
Police	108 90
Public Grounds	15 34
Public Buildings	175 66
Public Celebrations	50 43

Carried forward \$17,223 84

PRINTING DEPARTMENT.

11

DEPARTMENT.	Amount.
<i>Brought forward</i>	\$17,223 84
Public Works:	
Central Office	650 99
Bridge Service	761 80
Ferry Service	111 00
Lighting Service	19 20
Paving Service	1,061 27
Sanitary Service	297 81
Street Cleaning and Oiling Service	145 35
Sewer Service	1,280 84
Water Service	1,451 99
High Pressure Fire Service	105 46
Registry	346 48
Reference Library	3 00
Randidge Fund	1 00
Rapid Transit	180 00
Schoolhouse	1,606 21
Land and Buildings	69 50
Soldiers' Relief	82 37
Statistics	23 41
Supply	235 35
Sinking Funds	8 25
Street Laying-Out	376 00
Engineering	159 86
Treasury	918 16
Wire	176 54
Weights and Measures	74 15
County of Suffolk:	
Municipal Court, Civil Business	8 00
Probate Court	4 00
	\$27,381 83



ANNUAL REPORT
OF THE
PUBLIC BUILDINGS DEPARTMENT
FOR THE YEAR 1913-14.

BOSTON, February 2, 1914.

HON. JAMES M. CURLEY,

Mayor of the City of Boston:

DEAR SIR,— In accordance with section 24, chapter 3, of the Revised Ordinances of 1898, I submit the following as the annual report of the Public Buildings Department for the year ending January 31, 1914. The department has the care and custody of the following buildings:

City Hall; Courthouse and Police Station, East Boston; Municipal Building, South Boston; Ambulance Station, South Boston; Municipal Building, Upham's Corner; City Building, Codman square, Dorchester; City Building, Washington and Richmond streets; Curtis Hall Gymnasium Building and new Library Building, Jamaica Plain; Roxbury Courthouse, Roxbury; Thomas Street Schoolhouse, and of all other buildings in use for city offices, market purposes, halls for public meetings, and the several county buildings, also hired buildings or parts of same used for city offices, county purposes, wardrooms, armories, etc.

The original appropriation for general maintenance of this department for the financial year 1913-14 was \$255,000, and to this amount the sum of \$220 was

added (\$120 from the interest of the Charles E. French Fund to be expended only for repairs on the Old State House and \$100 for the purchase and care of public clock, Governor Dudley square), making a total appropriation in the sum of \$255,220. Of this sum there was expended \$251,019.61 for general repairs by the department and \$2,000 was transferred to the appropriation for City Hall Annex and \$100 to clock, Governor Dudley square, leaving a balance of \$2,100.39.

Work in the general repair line was pursued consistently where needed and while many of our buildings are old, I can conscientiously say that they are in very good condition at this time. This does not mean that further work will not be necessary, for deterioration is always taking place and more or less work has got to be done on them, at all times. Frequent and generous applications of paint will, in my judgment, do more than anything else to obviate this condition, a method that I have pursued in the past. Of the features in the repair line, the following appear to be of greater magnitude than usual:

Painted the entire outside of Old State House. Put on entire new roof of slate and copper on the Charity Building and Wayfarers' Lodge, also new fire escapes on the Charity Building. Enlarged twelve windows on the Commercial street end of the Quincy Market. Reinforced twelve roof trusses and substituted asbestolith for wood in many of the floors in the same building. Changed conductor system to one of surface drainage at the City Building, Washington and Richmond streets. Painted the entire outside of City Building, Washington and Norfolk streets. Installed new heating system and painted building outside and in at the Old Cross Street Schoolhouse. Reinforced outer walls of fuel house, Main street, Charlestown. Painted entire outside of Westerly Hall. Removed shingles and substituted slate on entire roof of Wardroom 20 Building, and relined gutters with 16-ounce copper. Painted the Municipal Building, Ward 16, on the inside and reconstructed the wardroom in the Roxbury Courthouse to provide accommodations for the Grand Army Post 26, who are to use same for headquarters.

Regarding new work, I would say that the past year has been one of much activity in this line. The new East Boston Courthouse and Police Station was completed during the year and accepted on November 14,

1913. Total appropriation for the building, including land, building and furnishing, was \$167,000. It is now occupied by Division 7 of the Police Department and the East Boston Municipal Court, the latter having been transferred from the temporary quarters in the Old Armory Building, Maverick and Bremen streets. This building is up-to-date in every respect.

The new Municipal Building, South Boston, was erected on site formerly occupied by the Perkins Institution and Massachusetts School for the Blind on Broadway; was completed and accepted on January 8, 1914. Total appropriation, \$192,000, which includes cost of land, building and furnishings. The building is of brick, three stories high, and provides accommodations for shower baths, large assembly hall to seat 1,000 persons, a branch of the Boston Public Library and quarters for the South Boston District Court.

Municipal Building, Ward 7, total appropriation, \$122,000. Site has been purchased, corner of Oak and Tyler streets, plans drawn, contract awarded on July 2, 1913, and building is in process of erection. Will probably be ready for occupancy about July, 1914. Accommodations will be provided in this building for an assembly hall, gymnasium, shower baths and branch of the Public Library, etc.

Municipal Building, Ward 17. On November 26, 1912, an appropriation in the sum of \$5,000 was provided for the preparation of preliminary studies, plans, etc., and on February 1, 1914, an added appropriation of \$125,000 for building was made, same to be erected on the site of the Old Vine Street Church, corner of Vine and Dudley streets, Roxbury. Contracts were let on November 19, 1913, and a building of brick, to contain an assembly hall, gymnasium with running track, shower baths, etc., also a branch of the Boston Public Library is being erected and will probably be ready for occupancy by the city about October, 1914.

Municipal Building, City square, Charlestown. Appropriation to date, \$130,000 for a building to be erected on the site of the old City Hall, Charlestown. Plans and specifications have been prepared and contract was awarded on October 18, 1913, and calls for completion at the expiration of ten months from date of contract. This building will be of brick, three stories in height with public clock on top and will provide accommodations for Division 15 of the Police Department and Charlestown District Court.

Police Station, South Boston. On April 4, 1913, an appropriation in the sum of \$100,000 was provided and on January 14, 1914, an extra appropriation of \$8,000. Site was procured on Third, Athens and D streets at a cost of \$21,450. Plans have been prepared for a building three stories in height of brick and to provide accommodations for an up-to-date Police Station. Bids for the erecting of same were opened on December 29, 1913, but at present writing contract has not been awarded.

On the City Hall Annex much work has been accomplished during the past year, in fact the building has been practically completed and the Assessing Department has been moved into same. A great deal has to be done as yet, however, on the inside and approaches. On account of numerous difficulties, which had to be adjusted before proceeding in certain lines, the work has not progressed as rapidly as I would like; it is hoped, however, that it can be fully occupied by April 1, 1914, at the latest, when the several departments now occupying hired quarters can be housed therein.

On June 3, 1913, an appropriation in the sum of \$5,000 for preliminary studies, plans, etc., and on November 22, 1913, an added appropriation of \$144,000 was made available for the erection of a municipal building in Ward 12. Plans and specifications are in process of completion, which call for a brick structure three stories high, with wardroom accommodating 500 persons, also showers and lockers in basement, large reading room for Public Library uses on the first floor, and gymnasium with running track, showers, etc., on the second floor. This proposition will be ready for advertisement in the near future.

An appropriation in the sum of \$47,000 is available for the erection of a police station, Dorchester. Architect has been selected and plans and specifications for an up-to-date police station are being prepared. There is also available an appropriation in the sum of \$3,000 for the preparation of preliminary studies, plans, etc., for a proposed new municipal building, Wards 21 and 22, tentative plans of which have already been prepared.

Municipal Building, Roslindale. Appropriation to date, \$141,000. Plans and specifications are being prepared for a building with the following provisions: Ward room in basement; assembly hall and branch

library on first floor; gymnasium and showers, etc., on second floor and running track on third floor.

The following buildings or parts of same were hired for municipal purposes:

For Offices:

- ¹ 37 Pemberton square.
- ² 730-742 Tremont Building.
- ² 824-828 Tremont Building.
- ² 919-920 Tremont Building.
- ² 926-927 Tremont Building.
- ² 1151 Tremont Building.
- ³ 517-529 Huntington Chambers.
- ² 610-613 Huntington Chambers.
- ⁴ 100 Summer street.
- ⁵ 88 Summer street. (Vault for storage of ballots.)
- ⁶ 6 Beacon street.
- ⁷ 901-905 Carney Building.

For Armories:

- 2152 Washington street, Roxbury. (Began occupancy July 1, 1910.)
- 25 Irvington street. (Began occupancy May 1, 1912.)
- 7 Green street. (Lease began June 29, 1911.)
- 243 Oliver Building. (Headquarters of Second Brigade.)
Lease began October 1, 1911.
- 130 Columbus avenue.

For Wardrooms:

- Maynard Hall, Ward 13. (Lease began September 1, 1911.)
- Minton Hall, Forest Hills, Ward 23.

For Ambulance Station:

- 15 National street. (Ground lease.) Land held on lease made for twenty years; expires on November 28, 1919.

For County Purposes:

- 274 Boylston street (3 rooms), for Medical Examiner.

Miscellaneous:

- Land and building, corner of Ashland and Washington streets, Roslindale, Mass. Transferred from Police Department, September 1, 1912. Lease expires June 30, 1915.

¹ Lease expires May 31, 1915. Part of rent paid by Police Department.

² Occupied without lease.

³ Lease expires August 31, 1914.

⁴ Lease expired November 30, 1913. Extended to January 31, 1914.

⁵ Lease expires March 31, 1914.

⁶ Began occupancy May 9, 1913.

⁷ Vacated May 1, 1913.

The ambulance station is located on National street, South Boston, on land leased from the Carney Hospital. The station is open day and night and answers calls at any hour and in any section of the city for persons desiring treatment at the Carney or other hospitals.

Number of accident cases during year	146
“ medical cases during year	329
“ surgical cases during year	303

Total	<u>778</u>
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Number transferred to Carney Hospital	506
“ “ City Hospital	35
“ “ Children’s Hospital	17
“ “ Cushing Hospital	9
“ “ Psycopathic Hospital	4
“ “ Lying-in Hospital	11
“ “ Long Island (to boat)	10
“ “ Hart Hospital	1
“ “ St. Monica’s Hospital	2
“ “ Peter Bent Brigham	2
“ “ McCreight Hospital	1
“ “ Reed Hospital	1
“ “ Hillside Hospital	2
“ “ Gordon Hospital	1
“ “ Boston Dispensary, Bennet street	1
“ “ Boston Eye and Ear Infirmary	2
“ “ Sheridan Hospital	1
“ “ Grace Hospital	2
“ “ St. Elizabeth’s Hospital	34
“ “ Good Samaritan Hospital	1
“ “ Maternity Hospital	1
“ “ New England Hospital for Women and Children	19
“ “ Free Home for Consumptives	5
“ “ Cullis Home	1
“ “ Elm Hill Hospital	1
“ “ St. Margaret’s Hospital	3
“ “ St. Mary’s Hospital	1
“ “ St. Luke’s Hospital	1
“ “ Boston Consumptives’ Hospital, ...	68
“ “ Holy Ghost Hospital	10
“ “ Soldiers’ Home, Chelsea	10
“ “ Tewksbury, Mass., Hospital (to train)	15

Total	<u>778</u>
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The following schedule will show the cost of maintenance of the ambulance station, the total number of patients carried and average cost of transportation for each patient for the past fourteen years:

YEAR.	Cost of Maintenance.	Total Number of Patients Carried.	Average Cost for Each Patient Carried.
1900 *	\$3,856 07	394	\$9 78
1901	6,241 78	636	9 81
1902	7,388 33	736	10 03
1903	6,224 78	765	8 13
1904	6,569 83	653	10 06
1905	6,920 16	648	10 68
1906	6,489 68	637	10 18
1907	6,793 75	768	8 84
1908	6,329 53	830	7 62
1909	6,495 03	815	7 96
1910	5,802 87	708	8 19
1911	7,120 62	789	9 02
1912	6,750 34	844	8 00
1913	7,598 79	778	9 77

* Nine months.

Requests for the use of ambulance by City Departments were received as follows:

From Consumptives' Hospital Department	88
“ Health Department	26
“ Soldiers' Relief Department	10
	<u>124</u>

The following is a general financial statement of the Public Buildings Department for the financial year of 1913-14:

APPROPRIATIONS.

General expenses (original appropriation)	\$255,000 00
Transfer from French Fund, repairs on Old State House	120 00
Transfer from Reserve Fund, repairs on clock, Governor Dudley square	100 00
	<u>\$255,220 00</u>
<i>Carried forward</i>	<u>\$255,220 00</u>

<i>Brought forward</i>		\$255,220 00
Transfer to the City Hall Annex	\$2,000 00	
Transfer to clock, Governor Dudley square	100 00	
Unexpended balance	2,100 39	
		4,200 39
Expended on public buildings, general expenses,		\$251,019 61
Expended on county buildings		55,530 07
Total		<u>\$306,549 68</u>

EXPENDITURES.

Public buildings	\$210,490 40
Wardrooms	10,958 03
Armories	21,972 39
Ambulance station	7,598 79
County buildings	55,530 07
	<u>\$306,549 68</u>

EXPENDED ON SPECIAL APPROPRIATIONS.

City Hall Annex	\$517,730 97
City Hall Annex, engineering plans	5,000 00
East Boston Courthouse and Police Station	50,879 69
Flagpole, Bayswater and Saratoga streets	397 25
Flagpole, Mt. Ida	397 25
Municipal Building, City square	4,755 91
Municipal Building, Roslindale	1,370 30
Municipal Building, South Boston	97,753 86
Municipal Building, Ward 7	37,906 45
Municipal Building, Ward 12	1,240 10
Municipal Building, Ward 17	2,469 64
Police Station, Dorchester	480 00
Police Station, South Boston	24,175 60
	<u>\$744,557 02</u>

RECAPITULATION.

Expended on general appropriations	\$306,549 68
Expended on special appropriations	744,557 02
	<u>\$1,051,106 70</u>

The following is a comparative statement of the credits and expenditures on account of appropriation for Public Buildings Department, General Expenses:

FOR THE PAST FOURTEEN YEARS.

YEAR.	Appropriation.	Transfers and Income.	Unexpended Balance.	Expenditures.
1900-01.....	\$216,000 00	\$53,754 89	.....	\$269,754 89
1901-02.....	284,000 00	24,411 69	.....	308,411 69
1902-03.....	250,000 00	.....	.....	250,000 00
1903-04.....	240,000 00	1,425 99	.....	241,425 99
1904-05.....	240,000 00	11,997 67	.....	251,997 67
1905-06.....	241,500 00	.....	\$397 44	241,102 56
1906-07.....	240,000 00	18,378 19	.....	258,378 19
1907-08.....	250,000 00	465 45	.....	250,465 45
1908-09.....	200,000 00	10,890 38	.....	210,890 38
1909-10.....	250,387 00	120 00	85,548 02	164,958 98
1910-11.....	195,000 00	240 00	246 21	194,993 79
1911-12.....	200,000 00	19,720 56	.....	219,720 56
1912-13.....	240,000 00	4,910 43	.....	244,910 43
1913-14.....	255,000 00	220 00	4,200 39	251,019 61

EXPENDITURES FOR PUBLIC BUILDINGS.

Salaries	\$13,070 79
Engineers, firemen, janitors and cleaning	69,125 42
Mechanics	7,094 08
Printing	437 97
Stationery	409 47
Postage	113 75
Advertising	7 80
Telephones	478 21
Car fares	239 58
Messenger service	58 85
Rents and taxes	40,278 46
Furniture and furnishings	5,505 99
Water rates	230 92
Ice	780 30
<i>Carried forward</i>	\$137,831 59

<i>Brought forward</i>	\$137,831 59
Teaming	862 90
Fuel	9,661 84
Gas	547 28
Electric light	15,728 15
Supplies	3,289 31
Clocks	287 05
Iron copper and wire work	2,560 46
Masonry	1,704 87
Carpentry	5,837 11
Plumbing	2,453 96
Gas and electric fixtures	1,036 03
Plastering and whitening	876 19
Roofing and gutters	4,310 95
Painting and glazing	8,012 77
Heating and ventilating	7,160 81
Auxiliary fire alarm	120 00
Elevators	671 27
Awnings	632 88
Flags and repairs	172 50
Removing snow from roof	47 75
Marble work	246 82
Granolithic work	2,225 46
Lawns and grounds	208 24
Review stands	264 90
Expert service	90 00
Clock, Peabody square	130 00
Insurance	328 75
Automobile and maintenance	3,190 56
	\$210,490 40

EXPENDITURES OF WARDROOMS.

Rents	\$935 00
Janitors and cleaning	4,727 25
Fuel	1,066 70
Gas lighting	1 48
Electric lighting	791 10
Painting and glazing	795 75
Plumbing	132 35
Carpentry	334 92
Roofing and gutters	798 79
Furniture and furnishings	538 50
Gas and electric fixtures	39 59
Heating and ventilating	380 42
Iron, copper and brass work	201 18
Granolithic	215 00
Total	\$10,958 03

EXPENDITURES OF ARMORIES.

Care, etc., allowance for	\$489 36
Rents	10,050 00
Fuel	969 75
Water rates	251 55
Gas lighting	2,087 88
Electric lighting	1,810 10
Telephones	235 56
Furniture and furnishings	459 99
Rifle practice, including transportation	4,925 79
Carpentry	59 71
Painting	122 87
Plumbing	4 64
Gas and electric fixtures	85 05
Heating and ventilation	354 51
Roofing and gutters	7 53
Taxes on rifle range	58 10
Total	<u>\$21,972 39</u>

EXPENDITURES OF AMBULANCE STATION.

Janitors, drivers and cleaning	\$4,995 25
Rent of land	250 00
Horsekeeping, shoeing, etc.	985 17
Telephones	64 43
Fuel	166 69
Gas	25 04
Electric lighting	53 18
Ice	6 25
Supplies	121 99
Furniture and furnishings	90 43
Ambulance repairs	385 47
Carpentry	112 48
Painting and glazing	134 10
Plumbing	60 90
Medical supplies	12 20
Heating and ventilating	117 85
Masonry	17 36
Total	<u>\$7,598 79</u>

EXPENDITURES OF COUNTY BUILDINGS.

Rents	\$570 00
Janitors and cleaning	10,706 80
Ice	444 48
Fuel	14,894 26
Gas lighting	106 04
Carried forward	<u>\$26,721 58</u>

<i>Brought forward</i>	\$26,721 58
Electric lighting	9,637 06
Furniture and furnishings	2,773 24
Supplies	1,584 03
Teaming	279 35
Clocks and repairs	60 00
Lawns	619 13
Awnings and flags	109 90
Iron, brass and wire work	430 82
Masonry	471 04
Carpentry	2,474 51
Plumbing	2,448 33
Gas and electric fixtures	810 83
Painting	1,602 07
Roofing and gutters	1,009 63
Heating and ventilating	2,453 74
Plastering and whitening	32 00
Marble work	142 83
Elevators	1,412 27
Stationery and postage	48 71
Salaries, retired veterans	375 00
Advertising	9 00
Expert services	25 00
 Total	 <u>\$55,530 07</u>

EXPENDITURES IN DETAIL ON SPECIAL APPROPRIATIONS.

City Hall Annex Building.

Contractor, Wells Brothers Company of New York	\$484,510 37
Architect, Edward T. P. Graham	15,606 62
Statuary, Roger Burnham Noble	6,000 00
Space and efficiency expert, Ralph M. Comfort	4,300 00
Clerk of Works	2,519 66
Electrical engineer, Thomas W. Byrne	1,447 94
Blueprinting, Spaulding Print Paper Company	1,172 37
Furniture, Paine Furniture Company	955 75
Heating, engineer, Joseph L. Hern	614 44
Photographs, Frank B. Conlin	195 00
Multigraphing, furniture specifications, F. S. Root Company	179 80
Expenses to New York, M. J. Fish and Edward T. P. Graham	74 90
Contracts, Printing Department	64 77
Typewriting, M. E. Sheehan	34 35
Advertising	55 00
	<u>\$517,730 97</u>

East Boston Courthouse and Police Station.

Contractor, G. A. Cahill	\$47,460 94
Architect, Harrison H. Atwood	2,072 00
Firing boilers, Hern-Furlong Company	898 00
Granolithic sidewalks, Jeremiah J. McCarthy & Co.	260 00
Wire partitions and guards, Oliver Whyte Company	151 75
Gas range, East Boston Gas Company	27 00
Photographs, Frank B. Conlin	10 00
	\$50,879 69

Police Station, South Boston.

Site, 1,915 square feet on D street, Ellen F. and William F. Giblin	\$3,500 00
Site, 2,914 square feet on Athens street, John M. Foley	2,300 00
Site, 1,742 square feet on Athens street, Arthur H. Menslage	2,000 00
Site, 1,096 square feet on Third street, Sarah L. Manning	1,000 00
Site, 2,350 square feet on D street, John J. Donovan	7,200 00
Site, 2,040 square feet on D street, estate of George Donegan	3,875 00
Site, 968 square feet on Third street, Hannah L. Perkins	1,575 00
Real estate expert, John C. Kiley	525 00
Building fence around lot — M. F. McDonald & Son	124 40
Architect, James E. McLaughlin	2,000 00
Advertising, <i>City Record</i>	5 80
Blueprints, Charles E. Townsend	70 40
	\$24,175 60

Municipal Building, South Boston.

Contractor, Whiton & Haynes Company	\$86,445 85
Architect, James E. McLaughlin	3,016 73
Electrical fixtures, Pettingell-Andrews Company, ...	2,514 09
Interior fittings, James E. Nelson Company	2,439 50
Furniture, Paine Furniture Company	2,007 55
Clerk of Works	1,205 29
Cleaning-up building	61 50
<i>Carried forward</i>	\$97,690 51

<i>Brought forward</i>	\$97,690 51
Typewriting, specifications for interior fittings, electric fixtures, etc.	31 25
Blueprints for interior fittings, electric fixtures, etc.	20 70
Advertising, <i>City Record</i>	11 40
	\$97,753 86

Municipal Building, Roslindale.

Architect, Harrison H. Atwood	\$1,368 00
Advertising, <i>City Record</i>	2 30
	\$1,370 30

Municipal Building, City Square, Charlestown.

Architect, James E. McLaughlin	\$4,257 64
Specifications, Printing Department	317 04
Firing boilers, Hern-Furlong Company	82 50
Blueprints	60 01
Clerk of Works	34 52
Advertising, <i>City Record</i>	4 20
	\$4,755 91

Municipal Building, Ward 7.

Contractors, McGahey & O'Connor	\$34,850 00
Architect, T. Edward Sheehan	2,381 92
Specifications, Printing Department	309 42
Clerk of Works	293 65
Blueprints	46 35
Advertising	13 30
Specifications, M. E. Sheehan	11 81
	\$37,906 45

Flagpole, Mt. Ida.

Furnishing and erecting pole — M. J. Connelly	\$385 00
Flag, New England Decorating Company	12 25
	\$397 25

Flagpole, Bayswater and Saratoga Streets.

Furnishing and erecting flagpole, Daniel Marr & Son	\$385 00
Flag, New England Decorating Company	12 25
	\$397 25

Municipal Building, Ward 17.

Architect, T. Edward Sheehan	\$1,973 58
Blueprints	85 32
Specifications, Printing Department	289 28
Clerk of works	103 56
Photographs, Frank B. Conlin	15 00
Advertising	2 90
	<u>\$2,469 64</u>

Police Station, Dorchester.

Architect, Harrison H. Atwood	<u>\$480 00</u>
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Municipal Building, Ward 12.

Architect, J. A. Schweinfurth	\$1,237 80
Advertising	2 30
	<u>\$1,240 10</u>

City Hall Annex, Engineering Plans.

Ralph M. Comfort, space efficiency expert	<u>\$5,000 00</u>
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RECAPITULATION OF GENERAL EXPENSES.

Rents and taxes, public buildings	\$40,528 46
Rents and taxes, wardrooms	935 00
Rents and taxes, armories	10,108 10
Use of rifle range and transportation	4,925 79
Salaries	13,160 79
Engineers, firemen, janitors, cleaning and mechanics	86,431 36
Car fare and messenger service	298 43
Telephones	778 20
Printing, stationery and postage	961 19
Advertising	7 80
Teaming	862 90
Water	482 47
Ice	786 55
Fuel	11,864 98
Gas and electric lighting	21,069 69
Horsekeeping and ambulance repairs	1,370 64
General repairs	43,090 14
Furniture and furnishings	6,787 06
Supplies and disinfectants	3,379 50
Automobile and maintenance	3,190 56
	<u>\$251,019 61</u>

County buildings	<u><u>\$55,530 07</u></u>
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The following is a statement showing buildings from which rent has been received during the past year, also income from other sources, together with the amounts, all of which are in charge of this department:

Building, Washington and Ashland streets, Ros-	
lindale	\$600 00
Old State House	100 00
Faneuil Hall	970 00
Wardrooms	430 00
Rotunda, Quincy Hall	5,000 00
Rooms in Quincy Hall	224 00
Produce Exchange	1,962 00
Old Franklin Schoolhouse	100 00
Repair shop annex	865 00
Armories, rent from Commonwealth	7,000 00
Old Town Hall, Brighton, Post 92	1 00
Vine Street Chapel, Post 26	1 00
Westerly Hall	4 00
Electric current, 100 Summer street	100 00
Refund of overpayment	2 00
Sale of old furniture	65 00
Sale of waste paper and desk	35 00
City scales	265 20
Pay station, telephones	73 46
Income from French Fund	120 00
Sale of horse	10 00
Sale of table	3 00
Sale of metal lockers	41 60
Sale of old material	16 27
Sale of old chairs	8 00
Sale of old buildings on site of police station,	
South Boston	259 87
Sale of safe and chair	15 00
	\$18,271 40

This department has custody and control of all furniture and furnishings in the various offices, wardrooms, ambulance station, armories, workshop, storeroom, courthouses, etc., which are under its supervision, and which are too numerous to itemize, but of which the following should be specified:

LIST OF CITY PROPERTY IN AMBULANCE STATION.

3 Horses.	2 Fur lap robes.
2 Ambulances.	3 Street blankets.
2 Sets of single harnesses.	2 Stable blankets.
1 Set of double harness.	

LIST OF CITY PROPERTY IN ARMORIES.

Troop A, First Squadron of Cavalry.

1 Roll-top desk.	1 Filing cabinet.
1 Chair.	8 Clothes lockers.
4 "Success" fire extinguishers.	1 Ruud instantaneous automatic gas water heater.
1 Three-stack bookcase.	1 Filing cabinet.

Troop B, First Squadron of Cavalry.

65 Chairs, common.	68 Lockers.
1 Roll-top desk.	3 Clothes closets.
1 Oak table.	520 Pants' hooks.
1 Bookcase (4 sections).	1 Unit.
1 Top for unit case.	6 Partitions for D. F. unit.
1 D. F. unit.	1 Flat-top desk.
1 Double flat-top desk.	3 Quartered oak swivel chairs.
1 Swivel desk chair.	

Troop D, First Squadron of Cavalry.

1 Table.	1 Oak flat-top desk.
12 Chairs.	1 Antique oak correspondence unit, complete.
1 S. & S. desk chair.	
65 Steel lockers.	

Second Brigade Headquarters.

1 Large rug carpet.	1 Bookcase.
1 Small rug carpet.	1 Mirror.
17 Small chairs.	2 Desks.
2 Large chairs.	4 Drop lights.
2 Desk chairs.	3 Window seat cushions.
1 Large centre table.	1 Typewriter desk.

Company L, Sixth Regiment.

3 Roll-top desks.	7 Tables.
2 Bookcases.	2 Desk chairs.
1 Umbrella stand.	40 Chairs.
3 Hat trees.	2 Wall clocks.
63 Lockers.	

PAINTINGS IN FANEUIL HALL.

Webster Replying to Haynes.	Robert Treat Paine.
Peter Faneuil.	Joseph Warren.
George Washington.	John Hancock.
Samuel Adams.	Henry Wilson.
Edward Everett.	Anson Burlingame.
Charles Sumner.	John A. Andrew.
John Quincy Adams.	Abraham Lincoln.
Caleb Stronge.	General Knox.
Commodore Preble.	Rufus Choate.
Admiral Winslow.	Wendell Phillips.

BUSTS IN FANEUIL HALL.

John Quincy Adams.
John Adams.

Daniel Webster.
Wendell Phillips.

LIST OF EMPLOYEES.

The following is a list of employees in the department
on January 31, 1914:

Public Buildings.

1 Superintendent.	7 Janitors in wardrooms.
3 Clerks.	3 Watchmen.
2 Clerks of work.	4 Custodians.
2 Inspectors.	1 Storekeeper.
1 Chief engineer.	3 Elevatormen.
1 Assistant engineer.	2 Carpenters.
7 Firemen.	1 Locksmith.
2 Chief janitors.	2 Electricians.
1 Superintendent of janitors.	1 Sheet-iron worker.
1 Assistant chief janitor.	60 Women, cleaning.
1 Laborer.	1 Matron.
1 Disinfector.	

Ambulance Station.

1 Janitor.	1 Woman, cleaning.
4 Drivers.	

County Buildings.

- 13 Custodians and janitors in various district courthouses.
- 8 Women, cleaning.
- 1 Retired veteran.

Respectfully submitted,

M. J. FISH,
Superintendent of Public Buildings.

PUBLIC BUILDINGS.

BUILDINGS.	Location.	Number of Feet in Lot.	Remarks.
City Hall.....	School street.....	25,915	Occupied by city offices.
Faneuil Hall and market under same.	Faneuil Hall square....	8,460	
Faneuil Hall market, house and hall over same.	North and South Market streets.	27,400	
Old State House.....	State street.....	4,239	Leased to Bostonian Society.
Curtis Hall.....	South street.....	49,907	Reconstructed as municipal gymnasium.
No. 11 Wareham street.....	Wareham street.....	8,500	Wire Department located in this building.
Annex.....	Harrison avenue.....	3,816	Rents for \$1,020 per annum.
Old Armory Building.....	Maverick street.....	4,337	Wardroom 2 in this building; upper part occupied by Post 159 G. A. R., and L. S. W. V.; temporary quarters of East Boston District Court located in wardroom.
Charity Building.....	Chardon street.....	19,963	Boiler and storehouse on lot.
City Temporary Home.....			
New City Building.....	Washington and Norfolk streets, Dorchester.	16,637	Used as branch library and Wardroom 24.
City Building.....	Washington and Richmond streets, Dorchester.	11,640	Used as branch library and sub-police station.
Town Hall.....	Washington street, Brighton.	13,431	Wardroom 25 in this building; other room leased to Post 92, G. A. R.
Wayfarers' Lodge.....	Hawkins street.....	9,523	
Land.....	Corner Vine and Dudley streets.	11,592	New building being erected.
Old Franklin Schoolhouse.....	Washington street.....	11,471	Wardroom 9, Posts 15 and 7 G. A. R. in this building.
Old Cross Street Schoolhouse....	Cross street, Charlestown.	1,708	Occupied by Col. F. B. Bogan Camp No. 14, L. S. W. V.
Land.....	Court square.....	15,175	New City Hall Annex being erected.
Fuel House.....	Main street, Charlestown.	2,430	First floor used for storage of fuel by Fire Department; upper floor leased to Post 149, G. A. R.
Library Building.....	.....	.....	On lot with Curtis Hall occupied as branch library.
Westerly Hall.....	Centre street, West Roxbury.	5,644	Public Library branch in this building.
Stable and lot of land.....	Chauncey place.....		Unoccupied.
Smith Schoolhouse.....	Joy street.....	1,938	Leased to Post 134, G. A. R.
* Old Probate Court Building.....	Court square.....	2,423	Occupied by city offices.

* The above building was surrendered to this department as not wanted for school, fire or county purposes.

PUBLIC BUILDINGS — *Concluded.*

BUILDINGS.	Location.	Number of Feet in Lot.	BUILDINGS.
Historical Building.....	30-32 Tremont street..	2,342	Occupied by city offices.
Wardroom, Ward 20.....	Meeting House Hill....		On lot with Mather Schoolhouse.
Wardroom, Ward 19.....	Elmwood street.....	5,684	
Municipal Building, Ward 16....	Columbia road.....	13,244	Wardroom, branch library, swimming pool and gymnasium in this building.
Thomas Street Schoolhouse.....	Thomas street.....	10,954	Leased to Boston Post 200, G. A. R.
Ambulance Station.....	National street.....		On land leased of Carney Hospital. Lease expires November 28, 1919.
Land and buildings.....	Corner Oak and Tyler streets.	6,111	Purchased as a site for new municipal building.
Courthouse and Police Station....	Meridian street, East Boston.	13,616	Occupied as Municipal Court and Police Station.
Land and Buildings.....	West Brookline street and Shawmut avenue,	10,224	Proposed new municipal building.
Land.....	East Broadway.....	21,250	New municipal building, partly occupied by District Court and Branch Library.
Land.....	Athens, D and West Third streets, South Boston.	13,025	Proposed Police Station.
Rifle Range.....	Woburn, Mass.....	53.3 acres	Not in use.
Rifle Range.....	Wilmington, Mass....	57 acres	Not in use.
Old Police Station 7.....	Meridian street.....	3,773	Not in use.

COUNTY BUILDINGS.

BUILDINGS.	Location.	Number of Feet in Lot.	Remarks.
Courthouse.....	Pemberton square....	87,035	
Jail.....	Charles street.....	130,740	Three buildings.
Municipal Court, Southern District,	Roxbury street.....	14,390	
Municipal Court, East Boston....	Meridian and Paris streets.	13,616	Police Station 7 in this building.
Municipal Court, South Boston....	Corner Dorchester and West Fourth streets.		Transferred to Fire Department. District Court now in new municipal building.
Municipal Court, Charlestown....	City square.....		Temporary quarters in Waverley House.
Municipal Court, Brighton.....	Washington street.		
Municipal Court, West Roxbury...	Station House 13.		
Municipal Court, Dorchester.....	Station House 11.		

In addition to the foregoing the following was leased or rented by this department for city offices, etc.:

LOCATION OF BUILDINGS.	Rent per Annum.	Number of Rooms.	Occupied by
37 Pemberton square....	\$6,600 per year and taxes; Police Department pays one-fourth of rent.	Whole building.	Police Commissioner and Police Department.
Huntington Chambers...	\$1,800 per year.....	4	Milk Inspectors, Rooms 610 to 613, inclusive.
Huntington Chambers...	\$3,200 per year.....	13	Bacteriological Laboratory, 517 to 529, inclusive.
73 Tremont street.....	\$450 per year.....	1	Room 1151, Art Commission.
73 Tremont street.....	\$4,550 per year.....	13	Law Department, 730 to 742, inclusive.
73 Tremont street.....	\$5,250 per year.....	9	Rooms 919-920, Cemetery Department; Supply Department, Rooms 824 to 826, inclusive; Board of Appeal, Rooms 827-828; Consumptives' Hospital Trustees, Rooms 926-927.
* 88 Summer street.....	\$1,000 per year.....	Vault.	Election Department, Storage.
† 100 Summer street.....	\$18,000 per year.....	4 floors.	City Departments.
‡ Carney Building.....	\$1,800 per year.....	5	Rooms 901-905, inclusive. Bath and Music Departments.
274 Boylston street.....	\$420 per year.....	3	Medical Examiner.
Building.....	Washington and Ashland streets, Roslindale.	Whole house.	Formerly occupied as a sub-police station, was transferred to this department by the Police Department, September 1, 1912, and was leased to T. F. Hannon till June 30, 1915.

* Lease began August 1, 1911. Used for storage of ballots, etc., by the Election Department. Lease expired November 30, 1913.

† Lease began July 1, 1911. Occupied by all departments formerly located in Old Court House. Lease expires April 30, 1914.

‡ Began occupancy June 1, 1910. Vacated May 1, 1913.

ARMORIES.

The following list will show the locations and rents of all armories February 1, 1914, in charge of this department:

OCCUPIED BY	Rent per Annum.	Location of Armory.
Headquarters, Second Brigade *.....	\$850	243 Oliver Building.
Company L, Sixth Regiment †.....	\$1,700	7 Green street.
" A, First Battalion of Cavalry...	City Building.	Engine House No. 4, Bulfinch street.
" B, First Battalion of Cavalry...	\$1,400	25 Irvington street. Lease expires January 31, 1914.
" D, First Battalion of Cavalry ‡..	\$1,350	2152 Washington street. Lease expires January 31, 1914.
" A, First Corps of Cadets.....	\$4,800	130 Columbus avenue.
" B, First Corps of Cadets.....		
" C, First Corps of Cadets.....		
" D, First Corps of Cadets.....		

* Began occupancy October 1, 1911.

† Began occupancy June 29, 1911. City has right to extend term of lease to January 31, 1917.

‡ Lease began July 1, 1910, made with privilege of extensions. Present lease expires January 31, 1914.

WARDROOMS.

The following list will show the location of the various wardrooms in the city and whether in city buildings or in hired buildings, and rent paid for same during the year:

WARD.	City or Rent.	Name of Building.	Location.
1.....	.....	No wardroom.	
2.....	City building.	Armory building.....	Maverick street.
3.....	" "	Old Winthrop Schoolhouse.....	Bunker Hill st., Chsn.
4.....	" "	Bunker Hill Grammar Schoolhouse,	Baldwin st., Chsn.
5.....	" "	Harvard Grammar Schoolhouse...	Devens street, Chsn.
6.....	" "	Faneuil Hall.....	Faneuil Hall square.
7.....	.....	No wardroom.	
8.....	City building.	No wardroom.	
9.....	" "	Old Franklin Schoolhouse.....	Washington street.
10.....	" "	Rice Schoolhouse.....	Appleton street.
11.....	" "	Prince Schoolhouse.....	Exeter street.
12.....	.....	No wardroom.	
13.....	\$300 per year.	Maynard Hall.....	245 D street.

WARDROOMS.— *Concluded.*

WARD.	City or Rent.	Name of Building.	Location.
14.....	.....	No wardroom.	
15.....	City building..	Municipal building, South Boston..	Broadway.
16.....	" "	Municipal building.....	Upham's Corner.
17.....	.....	No wardroom.	
18.....	.....	No wardroom.	
19.....	City building..	Old pumping station.....	Elmwood street.
20.....	" "	Wardroom building.....	Meeting House Hill.
21.....	.....	No wardroom.	
22.....	.....	No wardroom.	
23.....	\$600 per year.	Minton Hall *.....	Forest Hills Station.
24.....	City building..	City building.....	Washington and Nor- folk sts., Dorchester.
25.....	" "	Old Town Hall.....	Washington st., Bri.
26.....	.....	No wardroom.	

* Lease extended with right of further extensions to July 31, 1915.

City scales, as follows, viz.:

North scales, Haymarket square.

South scales, City stables yard, Albany street.

Roxbury scales, Eustis and Mall streets.

East Boston scales, Liverpool street. (Sold to Hodge Boiler Works, June 16, 1910.)

West Roxbury scales, Centre and La Grange streets. (Removed by Street Department in 1902.)

Jamaica Plain scales, Centre street and Starr lane.

City pound, located as follows, viz.:

East Boston, Ashley avenue.

ITEMIZED EXPENDITURES FOR EACH ARMORY BUILDING FOR YEAR 1913-14.

ARMORIES.	Headquarters Second Brigade.	Co. L, Sixth Regiment.	Troop A, First Cavalry.	Troop B, First Cavalry.	Troop D, First Cavalry.	First Corps Cadets.	Ancient and Honorable Co.	Rifle Practice.	Total Armories.
Rents.....	\$850 00	\$1,700 00	.....	\$1,350 00	\$1,350 00	\$4,800 00	.....	.....	\$10,050 00
Janitors, not on rolls.....	9 36	120 00	\$120 00	120 00	120 00	.....	.....	.....	489 36
Fuel.....	.....	3 50	.....	.....	.....	966 25	.....	.....	969 75
Water.....	.....	54 25	.....	12 60	.....	184 70	.....	.....	251 55
Gas.....	.....	36 42	34 96	.....	38 53	1,977 97	.....	.....	2,087 88
Electric lighting.....	.....	254 20	681 00	159 30	.....	.....	\$715 60	.....	1,810 10
Rifle practice, use of range.....	.....	.....	.....	.....	.....	.....	.....	\$3,944 31	3,944 31
Rifle practice, transportation to.....	.....	.....	.....	.....	.....	.....	.....	981 48	981 48
Telephone.....	29 17	43 67	77 83	39 68	45 21	.....	.....	.....	235 56
Taxes, on range.....	.....	.....	.....	.....	.....	.....	.....	58 10	58 10
Furniture.....	.....	.....	264 57	112 50	82 92	.....	.....	.....	459 99
Carpentry.....	.....	.....	33 74	.....	25 97	.....	.....	.....	59 71
Painting and glazing.....	.....	64 10	11 97	.....	2 50	.....	44 30	.....	122 87
Plumbing.....	.....	.....	4 64	.....	.....	.....	.....	.....	4 64
Roofing and gutters.....	.....	.....	7 53	.....	.....	.....	.....	.....	7 53
Heating and ventilation.....	.....	.....	354 51	.....	.....	.....	.....	.....	354 51
Gas and electric fixtures.....	.....	.....	4 07	.....	80 98	.....	.....	.....	85 05
Totals.....	\$888 53	\$2,276 14	\$1,594 82	\$1,794 08	\$1,746 11	\$7,928 92	\$759 90	\$4,983 89	\$21,972 39

ITEMIZED EXPENDITURES FOR EACH PUBLIC BUILDING FOR YEAR 1913-14.

PUBLIC BUILDINGS.	City Hall.	Tenement Building.	30 and 32 Tenement Street.	28 Court Square.	37 Pemberton Square.	Charity Bureau.	City Temporary Home.	Wayfare's Lodge.	Old State House.	Fernal Hall and Market.	Quincy Market.	Huntington Chambers.	Old Franklin School Building.	11 Warrham Street.	Public Clocks.	Old Town Hall, Brighton.	Storeroom.	City Scales.	City Building, Washington and Norfolk Streets.	Westerly Hall.	City Building, Washington and Richmond Streets.	Curtis Hall.	Superintendent's Office.	6 Beacon Street.	Cross Street Schoolhouse.	Smith Schoolhouse, Joy Street.	Old City Hall, Charlestown.	Fuel House, Main Street.	Municipal Building, Columbia Road.	Mechanics' Labor.	Carney Building.	Vault, 100 Summer Street.	100 Summer Street.	Thomas Street Schoolhouse.	New Library, Ward 22.	New Municipal South Bldg., Washington and Rte. 1.	Washington and Rte. 1, Bostonside.	Total Public Buildings.	Ambulance Station.	Total Public and Ambulance Station.		
Rents and taxes.		\$5,358 00			\$6,494 80							\$5,000 00											\$12,900 87	\$345 66						\$600 00	\$1,000 00	\$18,000 00				\$480 00	\$40,278 46	\$250 00	\$40,528 46			
Janitors and cleaning.	\$21,370 84		\$3,230 00	\$3,210 51		\$758 00			\$1,000 00	\$2,931 37		477 00		\$2,109 00		\$818 75		\$1,358 01				\$8,722 53					\$2,128 63		\$7,482 65					11,767 00		\$9 00	67,382 29	4,995 25	72,377 54			
Printing, stationery and postage.																							961 19														961 19			961 19		
Car fares.																							7 80														239 58			239 58		
Water rates.																							478 21														178 29	61 41	512 01			
Ice.	285 39	45 00		91 75		15 00						124 69		45 60								23 40					11 58							230 92			780 30	6 25	786 55			
Fuel.	4,787 03								269 77				\$205 55			\$6 50			190 20			1,718 75					152 40		2,331 64							9,661 84	166 69	9,828 53				
Gas.	165 46		1 49	22 33						49 68	30 47	55 46							16	\$2 50		12 62					225 10		8 73				3 28			547 28	25 04	572 32				
Electric lighting.	4,618 74	291 20	731 54	365 82		15 40				283 65		168 25		712 59				395 30			3,666 56			7 25				1,760 88		43 30		2,667 07			15,728 15	53 18	15,781 33					
Furniture.	2,007 58	286 55	130 36	339 05		830 95					51 13	64 00		138 25		22 00				102 63		139 41		862 90									1,133 63			5,505 99	90 43	5,596 42				
Masonry.	332 18					164 80	\$177 05					191 94				75 00					\$250 80	64 05					39 75		374 60					374 22	\$4 40		1,704 87	17 36	1,722 23			
Carpentry.	490 01	1 50	30 85	46 33		898 01	97 17	\$615 62	19 76	73 24	1,505 74	323 50	62 56		5 68			39 20	6 25	82 80	480 23				\$383 84	64 51	\$98 10		114 92				90 35		150 00	2,453 96	60 90	2,514 86				
Plumbing.	239 20		36 25	114 17		501 98	132 26	60 30	37 27	37 59	143 12		22 65	35 60				8 00		23 00	300 00	153 69				93 93	97 12	15 30	141 38													
Gas and electric fixtures.	407 35	6 00	1 58	42 67		66 33	3 44	1 59		10 70	25 50	34 25		33 77				40 43			96 31		15 11				11 16		107 51					132 33			1,036 03		1,036 03			
Plastering and whitening.	25 22					41 20	30 00	300 00			107 60		111 65					32 00			145 98								68 44					14 10			876 19		876 19			
Roofing and gutters.	159 85					2,023 65	336 75	196 31		830 25	593 91		6 15					7 79	66 80			19 60							14 44					65 45			4,310 95		4,310 95			
Iron, copper and wire work.	189 17		18 13	275 90		437 22	180 96		232 85		350 09	565 89		9 74				50 55		2 25	233 90														\$14 80			2,560 46		2,560 46		
Painting and glazing.	1,042 77	46 26	284 44	78 91		503 90	193 57	197 36	743 87	484 16	997 42		145 05	13 65				186 00	287 69	77 10	989 24		5 87	377 73	\$5 65	28 01	125 00	947 06				29 43	110 55	13 10	98 98	8,012 77	134 10	8,146 87				
Heating and ventilation.	772 14			23 13		769 97	6 60	110 24	141 09	3,041 11			99 82	865 38		11 58			139 76	22 50		373 70					27 34	204 20				62 00			7,160 81	117 85	7,278 66					
Elevators, City Hall and 100 Summer st.	329 21																																					671 27		671 27		
Ambulance repairs.											40 00																												385 47		385 47	
Awning.	353 88	5 50	42 00	121 00		18 50						4 50		1 00				3 00												11 75				51 75		20 00	632 88		632 88			
Fuel and repairs.	68 00								42 00	53 00									4 00	4 60																		172 90		172 90		
Messenger service.																							58 85																58 85		58 85	
Grain.																																								274 35		274 35
Medical supplies.																																								12 20		12 20
Traps and repairs.	66 15	8 00	16 00	50 50						10 00									6 50			31 00								75 00				23 90			287 05		287 05			
Review stand.	264 90																																							264 90		264 90
Maple work.	46 59					42 85					35 60										71 34								29 55					21 38			246 82		246 82			
Granite and asphalt work.											1,520 21								195 65			54 90							454 70							2,225 46		2,225 46				
Isolated grounds.														48 30	42 75						117 19																208 21		208 21			
Janitors (not on roll).	1,065 52	108 54	21 00	16 51		10 50				57 00		9 00		34 00							14 00		43 50		7 83			183 80		120 00		10 80		43 13			1,743 13		1,743 13			
Removal of snow and ice.	13 90										24 00																												47 75		47 75	
Insurance.	56 50																					66 00		136 75															328 75		328 75	
House goods.																																								49 60		49 60
Removal veterans' pay roll.																							160 92																160 92		160 92	
Automobile.																							3,190 56																	3,190 56		3,190 56
Export services.																							90 00																90 00		90 00	
Totals.	\$10,285 31	\$8,154 57	\$1,511 61	\$1,800 98	\$6,094 80	\$7,098 20	\$1,157 80	\$1,681 42	\$2,496 61	\$8,201 75	\$5,902 43	\$5,037 15	\$924 11	\$1,051 40	\$130 00	\$120 76	\$1,107 11	\$86 25	\$2,147 65	\$768 37	\$712 95	\$17,223 90	\$19,096 63	\$440 87	\$1,345 75	\$5 65	\$1,027 90	\$298 40	\$14,431 00	\$7,094 08	\$654 10	\$1,000 00	\$85,181 01	\$194 50	\$47 90	\$9 00	\$757 65	\$210,490 40	\$7,598 79	\$218,089 19		

ITEMIZED EXPENDITURES FOR EACH COUNTY BUILDING FOR YEAR 1913-14.

	Courthouse, Pemberton Square.	Roxbury Court.	Dorchester Court.	Charlestown Court.	East Boston Court.	South Boston Court.	West Roxbury Court.	Brighton Court.	Medical Examiners.	Morgue, North Grove Street.	Superintendent's Office.	Morgue, South District.	Totals.
Rents and taxes.....				\$150 00					\$420 00				\$570 00
Janitors and cleaning.....		\$5,162 67	\$876 75	1,060 50	\$984 75	\$835 00	\$696 50	\$780 00					10,396 17
Printing and stationery and postage...	\$14 07	24 10									\$10 54		48 71
Advertising.....		9 00											9 00
Ice.....	444 48												444 48
Fuel.....	13,203 97	940 88			329 29	33 75		143 87		\$242 50			14,894 26
Gas.....	1 43	2 03	8 81	9 04		2 11	27 39	4 99		50 24			106 04
Electric lighting.....	8,318 72	567 62			83 20	26 80				640 72			9,637 06
Teaming.....	10 10	1 25	2 50	259 75	4 50	1 25							279 35
Furniture.....	1,587 20	64 30	195 86	368 38	5 75		3 75	5 50	222 25			\$320 25	2,773 24
Supplies.....	1,388 91	105 08	20 98	25 90	28 41		12 50	2 25					1,584 03
Masonry.....	338 92	64 72	67 40										471 04
Carpentry.....	530 21	1,208 65	72 17	334 87	168 64	13 50	8 10	70 25		68 12			2,474 51
Plumbing.....	2,323 58	34 85	27 47	4 00	4 10	16 30	14 49	3 50		20 04			2,448 33
Gas and electric fixtures.....	399 72	236 44		45 06	3 07			6 35		120 19			810 83
Plastering and whitening.....		32 00											32 00
Roofing and gutters.....	890 67	105 80			13 16								1,009 63
Iron, copper and wire work.....	430 82												430 82
Painting and glazing.....	962 67	195 52	61 64	321 94	30 00	18 30		12 00					1,602 07
Heating and ventilating.....	1,741 03	152 53	4 66	325 21	5 79	9 80		3 75		185 42		25 55	2,453 74
Elevators.....	1,333 86									78 41			1,412 27
Awnings.....		8 00	11 00	7 00	12 30			5 00		3 25			46 55
Flags and repairs.....					4 45		58 90						63 35
Clocks and repairs.....	42 00			14 00	4 00								60 00
Marble work.....	142 83												142 83
Lawns and grounds.....								619 13					619 13
Janitors not on rolls.....	74 88			30 75			85 00		120 00				310 63
Expert services.....				25 00									25 00
Retired veterans' pay roll.....											375 00		375 00
Totals.....	\$34,180 07	\$8,915 44	\$1,349 24	\$2,981 40	\$1,681 41	\$956 81	\$906 63	\$1,656 59	\$762 25	\$1,408 89	\$385 54	\$345 80	\$55,530 07

ITEMIZED EXPENDITURES FOR EACH WARDROOM FOR YEAR 1913-14.

WARDROOMS.	Ward Room 2.	Ward Room 3.	Ward Room 9.	Ward Room 13.	Ward Room 15.	Ward Room 17.	Ward Room 18.	Ward Room 19.	Ward Room 20.	Ward Room 21.	Ward Room 23.	Ward Room 24.	Ward Room 25.	Total Ward Room Rooms.
Rents.....				\$300 00						\$35 00	\$600 00			\$935 00
Janitors.....	\$63 25	\$3,505 00	\$351 50			\$241 50			\$144 00				\$300 00	4,605 25
Fuel.....	35 50	1,024 95				3 00			3 25					1,066 70
Gas.....													1 48	1 48
Electric lighting.....								\$49 40	8 50				37 30	791 10
Furniture.....		376 70	243 20		\$10 80	65 20	\$26 00		2 50					538 50
Carpentry.....	1 20	510 00												334 92
Painting and glazing.....	350 95	218 30	50			8 35		7 23	53 50			\$34 19	11 65	795 75
Plumbing.....	2 25	15 65			4 40	7 70		285 00	132 05					132 35
Roofing and gutters.....		61 05				28 75			30 05				10 25	798 79
Heating and ventilation.....	5 00								798 79					380 42
Gas and electric fixtures.....		265 64	1 65			5 00			103 13					39 59
Iron and copper work.....		25 04				14 55								201 18
Granolithic work.....		201 18												215 00
Janitors not on roll.....		215 00												122 00
Totals.....	\$458 15	\$6,418 51	\$606 85	\$300 00	\$30 20	\$381 05	\$26 00	\$401 63	\$1,275 77	\$35 00	\$600 00	\$52 19	\$372 68	\$10,958 03

ANNUAL REPORT

OF THE

PUBLIC WORKS DEPARTMENT

FOR THE YEAR 1913.

[DOCUMENT 26.—1914.]

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ANNUAL REPORT

OF THE

PUBLIC WORKS DEPARTMENT

FOR THE

YEAR ENDING JANUARY 31, 1914.

Boston, February 2, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— In compliance with the Revised Ordinances, the annual report of the operations and expenses of the Public Works Department for the year ending January 31, 1914, is herewith respectfully submitted. The Public Works Department, created by Ordinances of 1910, chapter 9, was formed by consolidating the Engineering, Water and Street Departments.

ORGANIZATION.

The work of the department has been carried on during the year with four main divisions, as follows:

Central Office.
Highway Division.

Sewer and Water Division.
Bridge and Ferry Division.

NOTE.— The Boston and Cambridge Bridge Division, so called, is not properly a division of the Public Works

Department, as this work is in charge of a commission of two, one member appointed by the Mayor of Boston and the other by the Mayor of Cambridge, under the provisions of chapter 412 of the Acts of 1904; but because of the fact that the present Division Engineer of the Bridge and Ferry Division is the Boston member of this commission and also because one-half of the expenses of this commission is defrayed by the Bridge and Ferry Division of this department, it is here treated as a division of this department.

APPROPRIATIONS.

The money assigned for the work of the Public Works Department during the year was made available from the following sources:

First.— Maintenance appropriation, derived from the income of the city raised by taxation. Before the beginning of the financial year, February 1, the department estimates of the amounts necessary for the proper maintenance of the different services are submitted to the Mayor, who makes such recommendations as he may deem proper to the City Council. The maintenance appropriations, including permanent construction, as passed by the City Council and approved by the Mayor, were as follows:

Central Office	\$80,000 00
Bridge and Ferry Division	597,000 00
Highway Division	3,670,000 00
Sewer and Water Division, Sewer Service	380,000 00
	\$4,727,000 00
Water Service	895,000 00
	<u>\$5,622,000 00</u>

Boston and Cambridge Bridges.*

Second.— Loan inside the debt limit for building new streets assessable on abutting property, authorized by chapter 393 of the Acts of 1906. (Paving Service.)

Amount expended during the year	<u>\$265,583 18</u>
---	---------------------

Third.— Loan inside the debt limit under the provisions of chapter 426 of the Acts of 1897, as amended

* Paid by Bridge and Ferry Division.

by chapter 204 of the Acts of 1908, from which all sewerage works are built, except those in the Charles River Basin watershed. (Sewer Service.)

Balance, February 1, 1913	\$193,117 36
Loans	600,000 00
Total	<u>\$793,117 36</u>
Expended during the year	536,099 47
Balance January 31, 1914	<u><u>\$257,017 89</u></u>

Fourth.— Loan under the provisions of chapter 383 of the Acts of 1907, as amended by chapter 485 of the Acts of 1907, by chapter 514 of the Acts of 1908 and by chapter 612 of the Acts of 1911. Amended by chapter 348 of the Acts of 1912, which provides that the City of Boston shall in the year 1913 expend \$400,000 and in each of the next four years shall expend \$400,000, to be met by loan inside the debt limit. (Sewer Service.)

Balance February 1, 1913	\$119,615 74
Loans	400,000 00
Total	<u>\$519,615 74</u>
Expended during the year	455,997 19
Balance January 31, 1914	<u><u>\$63,618 55</u></u>

Fifth.— Loan inside the debt limit under the provisions of chapter 312 of the Acts of 1911 for the installation of a High Pressure Fire Service. (Water Service.)

Balance February 1, 1913	\$127,244 45
Loan	235,000 00
Total	<u>\$362,244 45</u>
Expended during the year	227,823 81
Balance January 31, 1914	<u><u>\$134,420 64</u></u>

\$150,000 loan authorized but not issued.

Sixth.— SPECIAL APPROPRIATIONS.

From Loans:

Loan inside the debt limit under the provisions of chapter 412 of the Acts of 1913, for the construction

of a new bridge over Belle Islet Inlet, between the City of Boston and the town of Winthrop. (Bridge Service.)

Loan, Winthrop Bridge	\$55,000 00
Balance January 31, 1914	<u>\$55,000 00</u>

CHELSEA BRIDGE NORTH. (Bridge Service.)

Balance February 1, 1913	\$217,469 83
Revenue during year	7,500 00
Total	<u>\$224,969 83</u>
Expended during the year	160,368 03
Balance January 31, 1914	<u>\$64,601 80</u>

CHELSEA BRIDGE SOUTH. (Bridge Service.)

Loan	\$75,000 00
Expended during the year	33,347 17
Balance January 31, 1914	<u>\$41,652 83</u>

MERIDIAN STREET BRIDGE. (Bridge Service.)

Balance February 1, 1913	\$39,545 67
Expended during the year	21,077 87
Balance January 31, 1914	<u>\$18,467 80</u>

BROADWAY BRIDGE REBUILDING.

Balance February 1, 1913	\$37,160 67
Loan	115,000 00
Total	<u>\$152,160 67</u>
Expended during the year	3,496 69
Balance January 31, 1914	<u>\$148,663 98</u>

EVERETT STREET, BRIGHTON, PROPERTY (TO BE USED FOR A REFUSE DESTRUCTOR PLANT). (Sanitary Service.)

Balance February 1, 1913	\$23,000 00
Balance January 31, 1914	<u>\$23,000 00</u>

LAND AND BUILDINGS, REFUSE STATION. (Sanitary Service.)

Balance February 1, 1913	\$61,110 85
Expended during the year	45,527 53

Balance January 31, 1914	<u>\$15,583 32</u>
------------------------------------	--------------------

REFUSE DESTRUCTOR SITE, SPECTACLE ISLAND. (Sanitary Service.)

Balance February 1, 1913	\$15,000 00
------------------------------------	-------------

Balance January 31, 1914	<u>\$15,000 00</u>
------------------------------------	--------------------

SERVICE MAINS AND RELAYING MAINS. (Water Service.)

Transferred from Water Service surplus	\$200,000 00
Expended during the year	86,945 40

Balance January 31, 1914	<u>\$113,054 60</u>
------------------------------------	---------------------

GENERAL REMARKS.

The work accomplished by the Public Works Department during the past year has been satisfactory, considering the amount expended, \$7,849,538.08. A great deal more work should have been done if the money had been available, particularly along the line of so-called permanent paving. The policy of the department of doing practically all new construction work by contract and using the day labor force for maintenance has been continued with satisfactory results.

It is recommended that more money be made available for the construction of sewerage works and the laying out and construction of private ways as public ways. There are in the city to-day something over 2,000 private ways, a considerable percentage of which are built up, and the residents of these private ways should be entitled to the same benefits which others receive who live on public streets.

A brief summary of the chief activities of the various divisions of the Public Works Department follows.

BRIDGE AND FERRY DIVISION.

Chelsea North Bridge was practically finished this year. The old single waterway 60 feet in width has been replaced by two waterways each 125 feet in width,

with a depth of 30 feet at low water, thus opening up the Mystic River Basin to navigation for the largest vessels.

The temporary Chelsea South Bridge is also practically completed.

The work of rebuilding L Street Bridge and strengthening the same to provide for street car traffic was finished. An electric motor was substituted for steam power for the operation of the draw span.

Pleasant Street Bridge over the Tremont Street Subway was widened and rebuilt during the year in connection with the widening of Pleasant street.

The construction of a subway for foot travel under the New York, New Haven & Hartford Railroad at Lawndale terrace, Jamaica Plain, was completed.

During the year two temporary public landings, one at Northern Avenue Bridge and the other at Summer Street Bridge, Fort Point channel, were completed and opened for public use.

The abolishment of the grade crossing on Saratoga street, East Boston, was completed on December 6, 1913.

In the Ferry Service a system of checking the collection of tolls for team traffic was put in operation and is working successfully.

A great amount of repair work was done on the ferry landings and boats, and the condition of the plant is better to-day than it has been for some years.

HIGHWAY DIVISION.

The expenditures for 1913 exceeded those for 1912 by \$310,541.61. This increase in expenditures is chiefly accounted for by the general increase in wages and the increased cost of the Sanitary Service. The increased cost of the Sanitary Service amounts to approximately \$134,000 and was due chiefly to the loss of the inland dumps, which means long hauls and consequent increased teaming charges.

The Paving Service of this division has continued its policy of extending the permanent pavements in the outlying districts as far as the money allotted would permit. Approximately 80,000 yards of permanent work were laid during the year, consisting of bitulithic surface on Washington street, Brighton, and South and Centre streets, Jamaica Plain; wood block on Washington street, Dorchester, and Warren avenue in the South End. Very little waterbound macadam was laid, but

a large amount of tar and asphalt macadam were laid, on which work was used about 90,000 tons of stone and over a half million gallons of tar and asphalt binder.

In the Lighting Service the old style hoods and inclosed arc lamps have all been changed to magnetite arc lamps in the Charlestown district. Gas lamps in the city proper have all been replaced by magnetite arc lamps or tungsten lamps. The proposed street-lighting contracts, both for gas and electricity, have not as yet been accepted.

SEWER AND WATER DIVISION.

The Sewer Service has been extended as far as the appropriation would permit, and the radical improvements of sewerage conditions in the South End are well under way, contract having been let for the construction of a pumping station at the corner of Union Park and Albany streets which, when completed, will be the largest automatic sewage underground pumping station in the world; and this station will keep the storm water from flooding the low yards and alleys in the South End district as far as the improvement has been extended. The new 56,000,000 gallon pumps at the Calf Pasture have been installed, but as yet have not been accepted because of certain changes demanded by the city which the contractor has not made.

In the Water Service $3\frac{1}{4}$ miles of old mains in the East Boston, city proper, Dorchester and West Roxbury districts were cleaned, thereby practically restoring their original carrying capacity. Eight and one-third miles of mains too small for modern fire protection were relaid in Back Bay, Roxbury, Dorchester and Hyde Park. In Dorchester a notable improvement has been made in the three-flat district. The Hyde Park fire protection, which was entirely inadequate, has been made satisfactory. Eleven miles of new mains, ranging in size from 8 to 16 inches, were laid by contract during the year. Two hundred and forty-five hydrants and 1,443 service pipes were established and 7,406 meters were installed.

A gratifying reduction in the consumption throughout the city was effected, the per capita rate having been reduced from 125 gallons in 1912 to 108 in 1913, representing a saving of about 10,000,000 gallons per day.

Reports in detail of the work accomplished by the department and the cost thereof are herewith annexed.

**Financial Statement of the Public Works Department,
February 1, 1913, to January 31, 1914.
Maintenance.**

DIVISION.	Appropriations and Transfers during 1913-14.	Revenue.	Total Credits.	Expenditures for the twelve months ending January 31, 1914.	Balances, January 31, 1914.
Central Office.....	¹ \$80,159 50		\$80,159 50	\$80,159 50	
Bridge and Ferry Division, ...	² 567,000 00	\$1,189 63	568,189 63	566,894 91	\$1,294 72
Bridge Service.....		289 13		289,167 52	
Ferry Service.....		900 00		277,727 39	
Highway Division.....	³ 3,769,840 50	* 98,805 44	* 3,868,645 94	3,867,124 70	1,521 24
Lighting Service.....				795,880 53	
Paving Service.....		* 22,692 59		* 1,392,468 22	
Sanitary Service.....		75,199 43		925,318 56	
Street Cleaning and Oil- ing Service.....		913 42		753,457 39	
Sewer and Water Division:					
Sewer Service.....	⁴ 380,000 00	7,208 91	387,208 91	387,120 67	88 24
Water Service.....	⁵ 899,338 91		899,338 91	899,338 91	
Totals.....	\$5,696,338 91	\$107,203 98	\$5,803,542 89	\$5,800,638 69	\$2,904 20

* Includes refund of \$616.62 overpayment.

¹ Appropriation	\$80,000 00	
Transferred from Highway Division	159 50	
		<u>\$80,159 50</u>
² Appropriation	\$597,000 00	
Revenue	1,189 63	
		<u>\$598,189 63</u>
Transferred to Highway Division	30,000 00	
		<u>\$568,189 63</u>
³ Appropriation	\$3,670,000 00	
Revenue	98,805 44	
		<u>\$3,768,805 44</u>
Transferred from Bridge and Ferry Division	30,000 00	
Transferred from Printing Department	25,000 00	
Transferred from Reserve Fund	25,000 00	
Transferred from City Debt Requirements, Interest	20,000 00	
		<u>\$3,868,805 44</u>
Transferred to Central Office	159 50	
		<u>\$3,868,645 94</u>
⁴ Appropriation	\$380,000 00	
Revenue	7,208 91	
		<u>\$387,208 91</u>
⁵ Appropriation	\$895,000 00	
Transferred	4,338 91	
		<u>\$899,338 91</u>

The expenditures under the several appropriations for the year 1913 were as follows:

DIVISION.	Current Expenses.	Special Appropriations.	Total Expenditures.	Balances, January 31, 1914.
Central Office	\$80,159 50	.....	\$80,159 50	
Bridge and Ferry Division:				
Bridge Service	289,167 52	\$368,317 77	657,485 29	\$349,112 55
Ferry Service	277,727 39	7,532 51	285,259 90	515 60
Highway Division:				
Lighting Service	795,880 53	.....	795,880 53	296,411 48
Paving Service	¹ 1,392,468 22	320,655 71	1,713,123 93	21,556 04
Sanitary Service	925,318 56	45,527 53	970,846 09	53,583 32
Street Cleaning and Oiling Service	753,457 39	.....	753,457 39	
Sewer and Water Division:				
Sewer Service	387,120 67	992,096 66	1,379,217 33	320,636 44
Water Service	899,338 91	314,769 21	1,214,108 12	² 247,475 24
Totals	\$5,800,638 69	\$2,048,899 39	\$7,849,538 08	\$1,289,290 67

¹ Includes \$616.62 overpayment refunded.

² Does not include \$150,000 authorized but not issued.

Comparative Table Showing Cost of Maintenance of the * Street Department and Public Works Department Since 1904.

DIVISION AND SERVICE.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14
Central Office.....	\$20,853 21	\$21,902 91	.....	.....	.....	\$22,518 63	\$23,627 76	\$72,943 26	\$77,515 65	\$80,159 50
Bridge.....	185,269 84	184,594 54	\$188,235 55	\$199,342 12	\$180,273 01	198,852 71	201,995 00	274,876 76	268,959 44	271,423 04
Boston and Cambridge Bridges....	16,263 90	20,878 84	11,609 64	11,230 57	18,524 29	18,464 72	22,006 57	21,055 26	17,183 87	17,744 48
Ferry.....	254,535 20	273,995 90	265,463 83	294,357 82	249,068 39	222,101 10	235,920 63	247,628 07	269,016 52	277,727 39
Lighting.....	.....	.....	826,804 01	840,016 93	809,510 06	719,574 91	710,294 84	726,967 18	768,779 08	795,880 53
Paving.....	808,604 99	874,636 88	800,246 89	831,113 67	775,838 06	1,089,247 94	1,178,546 90	1,162,660 29	1,236,686 29	1,361,082 17
Removal of snow....	264,840 43	137,115 89	77,023 96	144,117 96	58,143 37	131,357 56	112,623 21	124,961 68	106,691 07	64,007 49
Sanitary.....	706,529 89	703,382 08	767,859 76	790,243 78	745,200 90	637,255 93	723,249 64	730,292 62	790,809 01	925,318 56
Sewer.....	324,360 72	381,687 78	374,075 92	402,389 90	351,162 41	301,145 94	312,541 05	325,508 86	378,873 18	387,120 67
Street Cleaning.....	434,172 62	448,837 79	465,005 94	501,688 67	419,275 91	353,550 33	370,602 81	408,571 72	454,623 71	492,324 45
Street Watering.....	165,071 08	189,347 50	153,423 07	152,235 45	154,679 90	170,728 75	160,543 93	163,036 26	198,993 93	228,511 50
Water.....	.....	.....	.....	.....	.....	.....	.....	822,377 46	835,072 00	-899,338 91
Totals.....	\$3,184,092 88	\$3,236,350 11	\$3,989,748 57	\$4,166,736 87	\$3,761,676 30	\$3,894,798 52	\$4,051,952 34	\$5,080,879 42	\$5,403,203 75	\$5,800,638 69

* Engineering and Water Departments were consolidated into the Public Works Department February 1, 1911.

REVENUE.

*Collected by City Collector on Account of the Public Works
Department (Maintenance Account) and Credited to
General Revenue, as per Collector.*

Bridge Service:

Sale of old material	\$25 86	
Sale of horses	340 10	
		\$365 96

Ferry Service:

Tolls	\$103,797 50	
Rents	514 00	
Sale of old material	74 00	
Headhouse privileges	600 00	
Commission on telephone stations, ...	51 52	
		105,037 02

Lighting Service:

Rents		1,200 00
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Paving Service:

Assessments on abutters for side- walks	\$28,292 87	
Permits	31,572 92	
Stone from Chestnut Hill ledge	1,117 17	
Sale of buggy and cart	25 00	
Sale of old material	948 49	
Hire of steam roller	39 75	
Hyde Park sidewalk assessments	69 40	
		62,065 60

Sanitary Service:

Sale of manure	\$878 58	
Sale of offal — Hyde Park	1,267 65	
Sale of old material	289 59	
Hire of dumping scows	3,580 00	
Hire of teams	27 50	
Refund from building run at Fort Hill Wharf	356 00	
Dumping boat service	859 85	
		7,259 17

Street Cleaning Service:

Rent	\$600 00	
Sale of old barrels	3 50	
		603 50

Sewer Service:

Sewer Assessments	\$285 04	
Sewer Assessments — Hyde Park, ...	3,692 50	
Entrance fees	4,854 24	
Disposal of sewerage	6,423 73	

<i>Carried forward</i>	\$15,255 51	\$176,531 25
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CONTRACTS MADE BY PUBLIC WORKS DEPARTMENT, FROM FEBRUARY 1, 1913, TO JANUARY 31, 1914.
 Hired Team Contracts, from February 1, 1913, to January 31, 1914.

District.	Awarded to	Single, per Day.	Double, per Day.	Extra Men, per Day.	Paving Service.	Sanitary Service.	Sewer Service.	Street Cleaning Service.	Total.
1. South Boston and Dorchester North ¹ ...	Frank J. Hannon.....	\$3 24	\$4 98	\$2 00	\$4,638 96	\$8,051 52	\$435 75	\$1,487 16	\$14,613 39
3. Charlestown ¹	Northern Construction Co....	3 50	4 25	2 25	.....	5,101 35	.....	1,700 63	6,801 98
4. Brighton ¹	Bernard Malone.....	2 40	4 75	2 00	3,826 16	.....	159 12	.....	3,985 28
5. West Roxbury ¹	Edward Bryan.....	3 00	4 50	2 00	5,446 50	.....	141 75	.....	5,588 25
6-9. Dorchester and Ashmont ¹	James F. Dooley.....	3 00	4 95	2 00	7,990 30	115 00	787 07	.....	8,892 37
7. Roxbury South and Jamaica Plain ¹	George H. Noone.....	3 25	5 00	2 25	4,820 00	29,774 45	.....	.....	34,594 54
8. South End and Roxbury North ¹	Northern Construction Co....	3 50	5 25	2 50	11,619 57	31,651 12	.....	3,549 45	46,820 14
10. North and West Ends and Back Bay ¹ ..	Northern Construction Co....	3 25	4 25	2 25	1,317 07	15,519 51	.....	7,602 72	24,439 30
11. Hyde Park ¹	Thomas H. Corrigan.....	3 00	5 00	2 00	.....	.....	30 00	22 00	52 00

¹ Advertised and awarded to the lowest bidder.

BRIDGE AND FERRY DIVISION.—BRIDGE SERVICE.

Bridge Work.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1, ¹ Leasing storerooms under the new Charlestown Bridge.	Michael P. Coleman.....	Mch. 10, 1913.	Completed Feb. 1, 1913.....	*\$1,265 00	
2 Repairing and restoring railing of Chelsea Bridge South.	W. A. Snow Iron Works.....	Mch. 14, 1913.	Completed April 10, 1913.....	506 00	\$506 00
3 Repairing draw fender piers, Meridian Street Bridge.	Lawler Brothers.....	May 12, 1913.	Completed May 29, 1913.....	333 33	333 33
2 Dredging upper side new Chelsea Bridge North..	Bay State Dredging Company..	April 16, 1913.	Completed April 21, 1913.....	924 20	924 20
3 Dredging channel, Meridian Street Bridge.....	Bay State Dredging Company..	May 9, 1913.	Unfinished.....	600 00	324 40
4 Widening Pleasant Street Bridge, over subway...	W. A. & H. A. Root, Inc.....	June 21, 1913.	Completed Nov. 19, 1913.....	6,437 00	5,670 21
4 Repairing Tremont street pipe bridge, over B. & A. R. R.	Boston Bridge Works, Inc.....	July 8, 1913.	Completed Aug. 8, 1913.....	748 00	748 00
4 Building a temporary bridge at Chelsea Bridge South, over south channel of Mystic river.	Rendle & Stoddard.....	Aug. 15, 1913.	Unfinished.....	57,000 00	29,061 50
1, ¹ Paving and paving Brookline Street Bridge, Boston to Cambridge.	James Doherty.....	Aug. 19, 1913.	Completed Oct. 10, 1913.....	13,949 12	12,645 60
3 Cleaning and painting water pipe bridge, Tremont street, over B. & A. R. R.	W. L. Waples Company.....	Aug. 11, 1913.	Completed Sept. 16, 1913.....	260 00	260 00
3 Rebuilding Chelsea Bridge North, over north channel of the Mystic river, Charlestown to Chelsea, completion of contract No. 1.	William E. Litchfield.....	Aug. 20, 1913.	Unfinished.....	15,000 00	12,809 26
2, ¹ Purchase of old Chelsea North Temporary Bridge,	Rendle & Stoddard.....	Sept. 2, 1913.	.....	7,500 00	
3 Hot water heater, drawtender's house, Dorchester Avenue Bridge.	Henry N. Clark Company.....	Oct. 28, 1913.	Completed Nov. 20, 1913.....	220 00	227 50
4 Rebuilding draw span, Broadway Bridge, over Fort Point channel.	Boston Bridge Works, Inc.....	Nov. 20, 1913.	Unfinished.....	93,984 00	Nothing.
4 Rebuilding fender guard, Chelsea Bridge North..	W. H. Ellis.....	Nov. 28, 1913.	Unfinished.....	2,826 00	Nothing.
4 Building the substructure approaches, temporary bridge, etc., Granite Avenue Bridge, over Neponset river, between Milton and Boston.	Holbrook, Cabot & Rollins Corporation.	Dec. 4, 1913.	Unfinished.....	36,910 00	Nothing.
3 Bronze tablets on Chelsea Bridge North draw and Meridian Street Bridge draw.	T. F. McGann & Sons Company.	Jan. 13, 1914.	Unfinished.....	100 00	Nothing.

* Per year.

¹ Advertised and awarded to highest bidder.² Not advertised, only bid.³ Invitation bid, awarded to lowest bidder.⁴ Advertised and awarded to lowest bidder.⁵ Paid to city.⁶ One-half paid by the city of Cambridge.

Contracts in Force Made in Previous Years.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
Rebuilding Chelsea Bridge North, over north channel of the Mystic river, Charlestown to Chelsea, Contract No. 1.	George T. Rendle.....	Feb. 28, 1912.	Unfinished, work being completed by W. E. Litchfield.	\$178,003 80	\$163,998 74
Rebuilding Chelsea Bridge North, over north channel of the Mystic river, Charlestown to Chelsea, Contract No. 2.	Boston Bridge Works, Inc.	June 22, 1912.	Completed July 8, 1913.....	117,997 00	108,091 71

BRIDGE AND FERRY DIVISION.—FERRY SERVICE.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1, ² Weighing and vending machines in the ferry headhouses.	Autosales Gum and Chocolate Company.	Jan. 30, 1913.	Completed Jan. 31, 1914.....	\$600 00	\$600 00
³ Teaming coal from coal pockets from North or South Ferries, East Boston side, and delivering same to ferriboats.	Simon Collins.....	Feb. 8, 1913.	Completed Jan. 31, 1914.....	28 cents ton. (2,000 lbs.)	3,021 21
⁴ Furnishing and installing an 8-inch suction pipe for the circulating pump for the ferryboat "Noddle Island."	Boston Copper Works Company.	Feb. 24, 1913.	Completed Sept. 10, 1913.....	188 00	188 00
⁴ Painting ferryboat "John H. Sullivan"	J. J. Silva.....	June 7, 1913.	Completed Aug. 1, 1913.....	245 00	245 00
² Lease of land, No. 60 Eastern avenue.....	Patrick J. Connolly.....	Sept. 1, 1913.	Completed Jan. 31, 1914.....	* 12 50	

* Per month.

² Paid to city.³ Advertised and awarded to lowest bidder.⁴ Invitation bid, awarded to lowest bidder.¹ Advertised and awarded to highest bidder.

HIGHWAY DIVISION.—LIGHTING SERVICE.

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CITY DOCUMENT No. 26.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
*Furnishing and installing automatic devices for lighting gas lamps.	Automatic Gas Light Equipment Company.	Oct. 11, 1913.	Completed Nov. 24, 1913.	\$2,400 00	\$227 50

* Not advertised, only bid.

Contracts in Force Made in Previous Years.

CONTRACTS.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
* Gas lighting.	Rising Sun Street Lighting Company...	Sept. 2, 1909.	Extended to January 31, 1914.	Single gas burner, \$23.60 per year with gas; single gasoline or naphtha burner, \$29.20; lantern with two burners, \$35.20 with gas; lantern with three burners, \$47.60 with gas; fire alarm lamps, \$10.50 without gas.	\$258,188 84
* Electric lighting.	Edison Electric Illuminating Company,	May 7, 1909.	From April 1, 1909, to April 1, 1914.	\$385,000 per year.	486,096 54

* Not advertised, only bid.

* Artificial Stone Sidewalks.—Rebate.

CONTRACTOR.	Dated.	Contract Completed.	Price per Square Foot.	Amount Expended in 1913.
W. A. Murtfeldt Company.....	March 20, 1913.....	January 31, 1914.....	\$0 06	\$685 14
Jeremiah J. Sullivan.....	March 20, 1913.....	January 31, 1914.....	06	1,853 10
W. L. Waples Company.....	March 22, 1913.....	January 31, 1914.....	06	130 80
David M. Biggs & Co.....	March 22, 1913.....	January 31, 1914.....	06	798 66
John Landis.....	March 26, 1913.....	January 31, 1914.....	06	1,267 32

Warren Brothers Company.....	April 4, 1913.....	January 31, 1914.....	06	2,317 26
Armor Concrete Construction Company.....	April 8, 1913.....	January 31, 1914.....	06	883 80
John Varnerin.....	April 9, 1913.....	January 31, 1914.....	06	18 00
Hervey F. Armington, Inc.....	April 9, 1913.....	January 31, 1914.....	06	130 86
Thomas J. Hind, Inc.....	April 15, 1913.....	January 31, 1914.....	06	2,273 58
Connolly & Diamond.....	April 15, 1913.....	January 31, 1914.....	06	108 30
William J. Rafferty Company.....	April 16, 1913.....	January 31, 1914.....	06	95 46
Maggi & Smith.....	April 21, 1913.....	January 31, 1914.....	06	353 40
James Doherty.....	April 21, 1913.....	January 31, 1914.....	06	35 92
Adams Pond Company.....	April 25, 1913.....	January 31, 1914.....	06	1,298 16
C. W. Dolloff & Co.....	May 1, 1913.....	January 31, 1914.....	06	91 44
Robert Eagar, Jr.....	May 6, 1913.....	January 31, 1914.....	06	604 32
Alfred Brenoi.....	May 9, 1913.....	January 31, 1914.....	06	106 86
Michael D. Russo.....	May 14, 1913.....	January 31, 1914.....	06	567 12
Simpson Brothers Corporation.....	May 15, 1913.....	January 31, 1914.....	06	374 76
Hugh Nawn Contracting Company.....	May 23, 1913.....	January 31, 1914.....	06	24 48
W. J. Grosvenor & Co.....	June 3, 1913.....	January 31, 1914.....	06	777 24
Edgar R. Taylor.....	June 9, 1913.....	January 31, 1914.....	06	651 12
Frank P. Rossano.....	June 12, 1913.....	January 31, 1914.....	06	257 34
Charles R. Gow Company.....	June 14, 1913.....	January 31, 1914.....	06	109 98
Jeremiah J. McCarthy Company.....	June 27, 1913.....	January 31, 1914.....	06	76 44
John A. McCarthy.....	July 10, 1913.....	January 31, 1914.....	06	66 66
American Architectural Iron Works.....	August 15, 1913.....	January 31, 1914.....	06	Nothing.
Joseph Todesca.....	September 2, 1913.....	January 31, 1914.....	06	Nothing.
Benjamin Fox, Inc.....	October 24, 1913.....	January 31, 1914.....	06	106 56

* These walks are guaranteed by a surety company bond for five years (5) years from date of completion, and were laid on various public streets where the contractor had agreements with the abutters. The price, 6 cents per square foot, is equivalent to the expense to the city for one half the cost of brick sidewalk.

Asphalt Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1, 2 Union Park street, between Washington street and Harrison avenue, city proper. (Bermudez asphalt.)	Fred S. & A. D. Gore Corporation.	April 25, 1913.	Completed June 28, 1913.	(A) 2,360 square yards @ \$2 57 \$6,065 20 (B) 10 square yards @ 1 85 18 50 (C) 100 linear feet @ 0 19 19 00 (D) 87 linear feet @ 0 15 13 05 (E) 800 linear feet @ 0 15 120 00 (F) 20 square yards @ 2 25 45 00 (G) 10 square yards @ 0 95 9 50 (H) 10 square yards @ 50 5 00 (I) 23 square yards @ 2 25 51 75 (J) 5 square yards @ 0 95 4 75 (K) 12 square yards @ 0 50 6 00 (L) 5 square yards @ 3 75 18 75 (M) 20 square yards @ 0 50 10 00 (N) 10,100 square feet @ 0 15 1,565 50 (O) 50 square feet @ 0 15 7 75 (P) 1 cubic yard @ 3 25 3 25 (Q) 1 cubic yard @ 1 00 1 00	\$7,986 75
1, 2 Lovering place, between Washington street and Harrison avenue, city proper. (Trinidad asphalt.)	James Doherty.....	April 28, 1913.	Completed June 16, 1913.	(A) 525 square yards @ \$2 74 \$1,438 50 (C) 245 linear feet @ 0 26 63 70 (D) 10 linear feet @ 0 15 1 50 (E) 420 linear feet @ 0 15 63 00 (F) 10 square yards @ 2 27 22 70 (G) 5 square yards @ 0 97 4 85 (H) 10 square yards @ 0 51 5 10 (I) 5 square yards @ 2 05 10 25 (KK) 7 square yards @ 2 27 15 89 (L) 5 square yards @ 0 97 4 85 (J) 110 square yards @ 0 43 47 30 (M) 980 square feet @ 0 19 186 20 (NO) 1 cubic yard @ 3 50 3 50 (P) 1 cubic yard @ 1 00 1 00 (Q) Removing trees, 20 00	\$8,274 49
					\$1,898 59
					\$1,955 90

Hayward place, between Wash- ton street and Harrison avenue, city proper. (Bernudez asphalt.)	Boston Paving Company . . .	Aug. 9, 1913.	Completed Aug. 19, 1913.	(B) (G) (S) (T) (Q)	565 square yards @ \$2 05 20 square yards @ 1 15 65 cubic yards @ 8 25 2 cubic yards @ 10 00 1 cubic yard @ 1 25	\$1,158 25 23 00 536 25 20 00 1 25	\$1,709 00
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¹ Advertised and awarded to lowest bidder.

² Work done under chapter 393, Acts of 1906.

EXPLANATION OF LETTERS.

(A)	Furnishing and laying a 1½-inch wearing surface and a 1¼-inch binder and concrete base, including preparing site, and guaranteeing same for a period of five (5) years after completion.
(B)	Furnishing and laying a 1½-inch wearing surface and a 1¼-inch binder on existing concrete base, including preparing site and guaranteeing same for a period of five (5) years after completion.
(C)	Edgestones hauled and set.
(D)	Circular edgestone set.
(E)	Resetting edgestone.
(F)	Hauling and laying granite block paving with pitch joints and concrete base.
(FF)	Relaying granite block paving with pitch joints, including preparing site and concrete base.
(G)	Relaying granite block paving with gravel joints.
(H)	Hauling and laying flagging crosswalks with gravel joints.
(I)	Relaying flagging crosswalks with pitch joints.
(J)	Relaying flagging crosswalks with gravel joints, including preparing site and concrete base.
(K)	Relaying flagging crosswalks with pitch joints, including preparing site and concrete base.
(KK)	Furnishing and laying wood block pavement and concrete base.
(L)	Relaying brick sidewalks.
(M)	Furnishing and laying artificial stone sidewalks and driveways and guaranteeing same for five (5) years from date of completion.
(NO)	Rock excavation.
(P)	Excavation for water boxes and hydrants.
(Q)	Removing trees.
(R)	Furnishing and laying concrete base.
(S)	Extra binder.
(T)	

Asphalt Pavements.—Repairs.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1, 2 Repairing asphalt or bitulithic pavements.	Warren Brothers Company,	Jan. 30, 1913.	Completed Jan. 31, 1914.	\$39,890; wearing surface and bituminous binder or bitulithic pavement surface, \$1.37 per square yard; wearing surface repaired by surface heater method, 75 cents per square yard; extra bituminous binder, \$11 per cubic yard; concrete base, \$11.15 per square yard.	\$24,274 42

¹ Advertised and awarded to lowest bidder.² Acme asphalt.

Bitulithic Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1 Norfolk street, between Washington street and N. Y., N. H. & H. R. R. Bridge, near Corbet street, Dorchester.	James Doherty.....	April 21, 1913.	Unfinished.	(A) 15,200 square yards @ \$2 38 \$36,176 00 (B) 1,130 square yards @ 3 10 3,503 00 (C) 50 square yards @ 1 50 75 00 (D) 140 square yards @ 0 93 130 20 (E) 50 square yards @ 0 45 22 50 (F) 300 square yards @ 1 88 564 00 (G) 50 square yards @ 1 45 72 50 (H) 10 square yards @ 0 50 5 00 (I) 5,170 linear feet @ 0 23 1,189 10 (J) 810 linear feet @ 0 15 121 50 (K) 1,630 linear feet @ 0 14 228 20 (L) 20 square yards @ 0 30 6 00 (M) 54,300 square feet @ 0 14 1/2 8,009 25 (N) 500 square feet @ 0 15 75 00 (O) 20 cubic yards @ 3 25 65 00 (P) 1 cubic yard @ 1 00 1 00 (Q) 8,250 cubic yards @ 0 83 6,847 50 (R) Removing trees, etc. 690 00 (S) Building wall, 315 00	\$58,095 75

\$26,599 60

Washington street, from Cambridge street across Market street, Brighton.	Warren Brothers Company,	May 26, 1913.	Completed Nov. 12, 1913.	(A) 6,100 square yards @ \$2 62 \$15,982 00 (B) 1,350 square yards @ 4 20 5,670 00 (C) 10 square yards @ 1 85 18 50 (D) 50 square yards @ 0 42 21 00 (E) 300 square yards @ 2 20 660 00 (F) 10 square yards @ 1 80 18 00 (G) 10 square yards @ 0 40 4 00 (H) 50 linear feet @ 0 25 12 50 (I) 130 linear feet @ 0 22 28 60 (J) 1,230 linear feet @ 0 20 246 00 (K) 10 square yards @ 0 25 2 50 (L) 10,560 square feet @ 0 18 1,900 80 (M) 100 square feet @ 0 18 18 00 (N) 1 cubic yard @ 1 15 1 15 (O) 1 cubic yard @ 1 75 1 75 \$24,584 80 \$23,042 90
Spring street, between Allen and Poplar streets, city proper.	Warren Brothers Company,	June 13, 1913.	Completed June 30, 1913.	(A) 400 square yards @ \$2 68 \$1,072 00 (B) 50 linear feet @ 0 35 17 50 (C) 17 linear feet @ 0 35 5 95 (D) 340 linear feet @ 0 30 102 00 (E) 230 square yards @ 0 25 57 50 (F) 1 cubic yard @ 1 25 1 25 (G) 1 cubic yard @ 5 00 5 00 \$1,261 20 \$1,321 61
Centre and South streets, between Green and Keyes streets, West Roxbury.	Warren Brothers Company,	June 13, 1913.	Completed Nov. 25, 1913.	(A) 9,150 square yards @ \$2 63 \$24,064 50 (B) 1,720 square yards @ 4 18 7,189 60 (C) 60 square yards @ 1 85 111 00 (D) 60 square yards @ 0 40 24 00 (E) 280 square yards @ 2 15 602 00 (F) 60 square yards @ 1 75 105 00 (G) 20 square yards @ 0 35 7 00 (H) 60 linear feet @ 0 24 14 40 (I) 40 linear feet @ 0 19 8 00 (J) 4,400 linear feet @ 0 22 830 00 (K) 30 square yards @ 0 25 7 50 (L) 33,000 square feet @ 0 20 6,600 00 (M) 630 square feet @ 0 20 126 00 (N) 1 cubic yard @ 1 25 1 25 (O) 1 cubic yard @ 1 25 1 25 \$39,698 85 \$38,284 89

Bitulithic Pavement.—*Concluded.*

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
¹ , ² Harvard avenue, between Commonwealth avenue and Cambridge street, Brighton.	Coleman Brothers.	Sept. 12, 1913.	Unfinished.	(A) 6,150 square yards @ \$2 50 \$15,375 00 (C) 120 square yards @ 1 50 180 00 (E) 280 square yards @ 0 50 140 00 (F) 180 square yards @ 2 00 360 00 (G) 10 square yards @ 1 50 15 00 (H) 20 square yards @ 1 00 20 00 (I) 140 linear feet @ 0 17 23 80 (J) 115 linear feet @ 0 17 19 55 (K) 2,650 linear feet @ 0 13 344 50 (M) 20,300 square feet @ 0 16 3,248 00 (N) 1,050 square feet @ 0 20 210 00 (O) 1 cubic yard @ 3 00 3 00 (P) 1 cubic yard @ 1 25 1 25 (Q) 3,100 cubic yards @ 0 60 1,860 00 (T) 1,160 square yards @ 4 176 00 (R) Removing trees, etc. 100 00	\$26,076 10
					Nothing

¹ Advertised and awarded to the lowest bidder.² Work done under chapter 393, Acts of 1906.

EXPLANATION OF LETTERS.

- (A) Furnishing and laying bitulithic pavement and guaranteeing same for a period of five (5) years after completion.
 (B) Furnishing and laying granite block paving with pitch joints, including concrete base.
 (C) Granite block paving relaid with pitch joints on concrete base.
 (D) Granite block paving relaid with gravel joints.
 (E) Granite block paving relaid with gravel joints.
 (F) Flagging crosswalks hauled and laid with pitch joints, including concrete base.
 (G) Flagging crosswalks relaid on concrete base with pitch joints.
 (H) Flagging crosswalks relaid with gravel joints.
 (I) Edgestones and corners hauled and set.
 (J) Circular edgestones set.
 (K) Edgestones reset.
 (L) Brick sidewalks relaid.
 (M) Furnishing and laying artificial stone sidewalks and guaranteeing same for a period of five (5) years after completion.
 (N) Furnishing and laying artificial stone driveways and guaranteeing same for a period of five (5) years after completion.
 (O) Rock excavation.
 (P) Excavation for water boxes and hydrants.
 (Q) Excavation other than rock.
 (R) Removing trees, etc.
 (S) Building wall.
 (T) Furnishing and laying wood block pavement and guaranteeing same for a period of five (5) years after completion.

Brick Block Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913
1, 2, 3 Hancock and Bowdoin streets, between Winter and Hancock streets, Dorchester.	Central Construction Company.	June 26, 1913.	Completed Sept. 12, 1913.	(A) 1,000 square yards @ \$2 30 \$2,507 00 (B) 450 linear feet @ 0 20 90 00 (C) 115 linear feet @ 0 20 23 00 (D) 12 square yards @ 2 00 24 00 (E) 17 square yards @ 0 70 11 90 (F) 25 square yards @ 0 80 20 00 (G) 20 square yards @ 1 25 25 00 (H) 5 square yards @ 1 50 7 50 (I) 8 square yards @ 0 70 5 60 (J) 3,870 square feet @ 0 25 967 50 (K) 140 cubic yards @ 5 50 770 00 (L) 200 square yards @ 1 00 200 00	\$5,185 84

¹ Advertised and awarded to lowest bidder.² Mack brick used.³ Work done under Chapter 393, Acts of 1906.

EXPLANATION OF LETTERS.

- (A) Furnishing and laying brick block paving and concrete base, including preparing site, and guaranteeing same for a period of five (5) years after completion.
 (B) Circular edgestone set.
 (C) Resetting edgestone.
 (D) Hauling and laying granite block paving with grout joints and concrete base.
 (E) Relaying granite block paving with gravel joints.
 (F) Hauling and laying granite block paving with gravel joints.
 (G) Hauling and laying flagging crosswalks with grout joints and concrete base.
 (H) Hauling and laying flagging crosswalks with gravel joints.
 (I) Relaying flagging crosswalks with gravel joints.
 (J) Furnishing and laying artificial stone sidewalks and driveways and guaranteeing same for five (5) years from date of completion.
 (K) Furnishing and laying concrete base.
 (L) Furnishing, placing and seeding loam spaces.

Wood Block Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1 Marvin, Vernon and Ruggles streets, between Washington street and Shawmut avenue, Roxbury.	Boston Paving Company . . .	July 1, 1913.	Completed Oct. 22, 1913.	(A) 2,660 square yards @ \$3 69 \$9,815 40 (C) 25 square yards @ 2 00 50 00 (E) 95 square yards @ 50 47 50 (F) 35 square yards @ 2 50 87 50 (G) 30 square yards @ 2 00 60 00 (I) 75 linear feet @ 75 18 75 (J) 25 linear feet @ 0 19 4 75 (K) 1,760 linear feet @ 0 15 264 00 (L) 30 square yards @ 0 30 9 00 (M) 10,000 square feet @ 0 18 1,800 00 (N) 70 square feet @ 0 18 12 60 (O) 1 cubic yard @ 3 50 3 50 (P) 1 cubic yard @ 1 25 1 25 \$12,174 25	\$12,439 88
1 Warren avenue, between Berkeley street and Columbus square, city proper.	Boston Paving Company . . .	July 1, 1913.	Completed Dec. 13, 1913.	(A) 12,350 square yards @ \$3 69 \$45,571 50 (C) 75 square yards @ 1 85 138 75 (E) 50 square yards @ 0 43 21 50 (F) 60 square yards @ 1 85 111 00 (G) 50 square yards @ 1 85 92 50 (H) 10 square yards @ 0 43 4 30 (I) 100 linear feet @ 0 23 23 00 (J) 175 linear feet @ 0 15 26 25 (K) 3,480 linear feet @ 0 13 452 40 (L) 370 square yards @ 0 50 185 00 (M) 4,520 square yards @ 0 30 1,356 00 (N) 1 cubic yard @ 3 50 3 50 (P) 1 cubic yard @ 1 25 1 25 \$47,986 95	\$47,977 39

1, 2 Pleasant street, between Eliot and Washington streets, city proper.	Coleman Brothers	July 11, 1913.	Unfinished.		
				(A) 6,320 square yards @ \$3.70	\$23,384.00
				(B) 230 square yards @ 3.00	870.00
				(C) 30 square yards @ 2.00	60.00
				(D) 140 square yards @ 1.00	140.00
				(E) 1,100 square yards @ 3.65	4,015.00
				(F) 160 square yards @ 0.50	80.00
				(G) 225 square yards @ 2.00	450.00
				(H) 10 square yards @ 1.00	10.00
				(I) 1,200 linear feet @ 0.20	240.00
				(J) 460 linear feet @ 0.20	92.00
				(K) 1,280 linear feet @ 0.13	166.40
				(L) 80 square yards @ 0.30	24.00
				(M) 23,710 square feet @ 0.16	3,793.60
				(N) 230 square feet @ 0.23	52.90
				(O) 1 cubic yard @ 4.00	4.00
				(P) 1 cubic yard @ 1.00	1.00
				(R) 102 linear feet @ 0.20	20.40
					\$33,403.30
					\$31,554.80
1, 2 Dorchester avenue, from Ralston street about 140 feet southerly, Dorchester.	Coleman Brothers.....	Aug. 9, 1913.	Completed Sept. 10, 1913.	(A) 440 square yards @ \$3.90	\$1,716.00
				(C) 20 square yards @ 2.00	40.00
				(E) 140 square yards @ 0.60	84.00
				(F) 5 square yards @ 2.00	10.00
				(G) 15 square yards @ 1.80	27.00
				(H) 5 square yards @ 1.00	5.00
				(I) 10 linear feet @ 0.25	2.50
				(K) 320 linear feet @ 0.16	51.20
				(L) 320 square yards @ 0.35	112.00
				(P) 1 cubic yard @ 2.00	2.00
					\$2,097.70
					\$1,822.48
1, 2 Church street, between Boylston and Providence streets, city proper.	Coleman Brothers.....	Aug. 9, 1913.	Completed Aug. 11, 1913.	(A) 440 square yards @ \$3.90	\$1,716.00
				(E) 5 square yards @ 0.35	1.75
				(I) 10 linear feet @ 0.20	2.00
				(J) 9 linear feet @ 0.20	1.80
				(K) 50 linear feet @ 0.15	7.50
				(M) 1,640 square feet @ 0.17	278.80
				(O) 1 cubic yard @ 3.00	3.00
				(P) 1 cubic yard @ 2.00	2.00
					\$2,012.85
					\$1,990.38

Wood Block Pavement.—*Concluded.*

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1, Exchange street, from State street about 174 feet northerly, city proper.	Central Construction Company.	Nov. 10, 1913.	Completed Dec. 3, 1913.	(A) 294 square yards @ \$4 96 \$1,458 24 (B) 10 square yards @ 2 45 24 50 (C) 10 square yards @ 1 49 14 90 (D) 5 square yards @ 0 90 4 50 (E) 2 square yards @ 2 80 5 60 (F) 4 square yards @ 1 75 7 00 (G) 2 square yards @ 2 35 4 70 (H) 2 square yards @ 1 35 2 70 (I) 10 linear feet @ 4 00 40 00 (J) 64 linear feet @ 0 30 19 20 (K) 20 square yards @ 0 43 8 60 (L) 1 cubic yard @ 1 00 1 00	\$1,554 94
2 Beacon street, between Massachusetts avenue and Raleigh street, city proper.	Central Construction Company.	Dec. 3, 1913.	Completed Jan. 21, 1914.	(X) 500 square yards @ \$3 27 \$1,635 00 (Y) 300 square yards @ 0 98 294 00 (W) 10 cubic yards @ 6 90 69 00	\$1,998 00
					\$2,180 61
					\$7,173 45

¹ Advertised and awarded to the lowest bidder.² Work done under chapter 393, Acts of 1906.³ Contract extended to Dock square.

EXPLANATION OF LETTERS.

- (A) Furnishing and laying wood block pavement, including concrete base, and guaranteeing same for a period of five (5) years after completion.
 (B) Furnishing and laying wood block pavement and guaranteeing same for a period of five (5) years after completion.
 (C) Granite block paving relaid with pitch joints on concrete base.
 (D) Granite block paving relaid with pitch joints.
 (E) Granite block paving relaid with gravel joints.
 (F) Flagging crosswalks relaid and laid, including concrete base, with pitch joints.
 (G) Flagging crosswalks relaid on concrete base with pitch joints.
 (H) Flagging crosswalks relaid with gravel joints.
 (I) Edgestones and corners hauled and set.
 (J) Circular edgestones set.
 (K) Edgestones reset.
 (L) Brick sidewalks relaid.
 (M) Furnishing and laying artificial stone sidewalks and guaranteeing same for a period of five (5) years after completion.
 (N) Furnishing and laying artificial stone driveways and guaranteeing same for a period of five (5) years after completion.
 (O) Rock excavation.
 (P) Excavation for water boxes and hydrants.
 (Q) Granite block paving furnished and laid with pitch joints, including concrete base.
 (R) Steel angles set.
 (S) Flagging crosswalks hauled and laid, including pitch joints.
 (T) Brick sidewalks laid, including preparing site.
 (U) Flagging crosswalks relaid with pitch joints.
 (V) Relaying wood block pavement.
 (W) Furnishing and laying concrete base.
 (X) Furnishing and laying wood block pavement.

Street Construction under Chapter 393 of the Acts of 1906.
Macadam Roadways.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
¹ , ² Clement avenue, between Stratford and Park streets, Dorchester.	Thomas F. Minton.....	April 28, 1913.	Completed July 7, 1913....	\$2,396 90	\$2,478 35
¹ , ² Lithgow street, between Washington street and Talbot avenue, Dorchester.	Jeremiah J. McCarthy Company,	May 1, 1913.	Completed June 18, 1913....	2,046 90	1,955 90
¹ , ² Don street, between Woodrow avenue and Callender street, Dorchester.	Boston Paving Company.....	May 1, 1913.	Completed Sept. 6, 1913....	1,839 50	1,827 72
¹ , ² Playstead road, between Savin Hill avenue and Springdale street, Dorchester.	William J. Rafferty Company....	May 2, 1913.	Completed July 14, 1913....	1,951 86	2,603 36
¹ , ² Dawes street, between East Cottage and Willis streets, Dorchester.	Jeremiah J. McCarthy Company,	May 6, 1913.	Completed July 5, 1913....	1,688 25	1,725 96
¹ , ² Quincefield street, between Humphreys and Wendover streets, Dorchester.	James Doherty.....	May 6, 1913.	Completed July 16, 1913....	1,082 13	1,099 08
¹ , ² Bynner street, between South Hunting-ton avenue and Day street, Roxbury.	J. C. Coleman & Sons Company..	May 6, 1913.	Completed Sept. 27, 1913....	4,268 50	4,395 43
¹ , ² Tyndale street, between Walworth and Guernsey streets, West Roxbury.	Hugh J. McGuire.....	May 12, 1913.	Completed Nov. 15, 1913....	10,703 30	10,720 73
¹ , ² Walworth street, between Belgrade avenue and Brook street, West Roxbury.	Hugh J. McGuire.....	May 12, 1913.	Completed Dec. 5, 1913....	6,444 60	6,336 75
¹ , ² Vesta road, between Blue Hill avenue and Harvard street, Dorchester.	James Doherty.....	May 16, 1913.	Completed Nov. 11, 1913....	2,777 06	2,836 95
¹ , ³ Hansborough street, between Blue Hill avenue and Harvard street, Dorchester.	James Doherty.....	May 16, 1913.	Completed July 24, 1913....	4,123 15	4,140 63

¹ Advertised and awarded to lowest bidder.² Tar macadam.³ Asphalt macadam.

Street Construction under Chapter 393 of the Acts of 1906.—Continued.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
1, 3 Mountfort street, between Audubon road and St. Mary's street, city proper.	James Doherty.....	May 17, 1913.	Completed Sept. 22, 1913...	\$1,980 70	\$2,722 55
1, 3 Greenock street, between Blue Hill avenue and Harvard street, Dorchester.	James Doherty.....	May 17, 1913.	Completed Aug. 4, 1913....	3,707 30	3,753 26
1, 3 Whitfield street, between Wheatland and Talbot avenues, Dorchester.	William J. Rafferty Company....	May 23, 1913.	Completed Aug. 28, 1913....	4,636 94	3,816 76
1, 2 Pricings street, between Mozart street and Chestnut avenue, Roxbury.	John Kelly Company.....	May 26, 1913.	Completed July 31, 1913....	2,254 05	2,293 98
1, 2, 4 Calumet street, between Parker Hill avenue and Hillside street, Roxbury.	James Doherty.....	June 3, 1913.	Completed Nov. 8, 1913....	8,432 95	6,471 69
1, 3 Cliftondale street, between Kittredge and Norfolk streets, West Roxbury.	Thomas F. Minton.....	June 9, 1913.	Completed Dec. 31, 1913....	7,147 45	7,178 51
1, 4, 4 Orient avenue, from Walley street to beyond Tower street, East Boston.	James Doherty.....	June 13, 1913.	Completed Nov. 6, 1913....	20,505 20	8,297 49
1, 2 Emmons street, between Paris and Chelsea streets, East Boston.	Jeremiah J. McCarthy Company,	July 10, 1913.	Completed Oct. 28, 1913....	1,739 25	1,857 35
1, 2 Evans road, between Corey road and Brookline line, Brighton.	John J. Lane.....	July 18, 1913.	Completed Aug. 25, 1913....	810 47	856 95
1, 2 Naples road, between Commonwealth avenue and Brookline line, Brighton.	John J. Lane.....	July 18, 1913.	Completed Aug. 6, 1913....	919 42	924 58
1, 2, 5 Evelyn street, between Blue Hill avenue and Norfolk street, Dorchester.	Jeremiah J. McCarthy Company,	July 28, 1913.	Completed Oct. 29, 1913....	1,858 00	1,880 99
1, 2, 5 Woolson street, between Blue Hill avenue and Norfolk street, Dorchester.	Jeremiah J. McCarthy Company,	July 28, 1913.	Completed Oct. 29, 1913....	2,274 00	2,108 00

1, 3, 4 Roach street, between Dorchester avenue and Pleasant street, Dorchester.	James Doherty.....	Aug. 4, 1913.	Unfinished.....	1,820 86	1,333 23
1, 2, 4 Lawndale terrace, between Lamartine and Amory streets, West Roxbury.	James Doherty.....	Aug. 15, 1913.	Unfinished.....	1,296 59	1,084 75
1, 2, 4 Mitchell street, from Old Colony avenue about 240 feet northerly, South Boston.	William J. Rafferty Company....	Aug. 15, 1913.	Unfinished.....	669 66	697 18
1, 2, 4 Crossman street, between Norfolk and West Selden streets, Dorchester.	James Doherty.....	Aug. 25, 1913.	Unfinished.....	3,331 80	614 12
1, 2, 4 Porter street, between Bismarck and Amory streets, West Roxbury.	James Doherty.....	Aug. 25, 1913.	Not started.....	2,001 15	Nothing.
1, 2 Potosi street, between Mt. Ida road and Percival street, Dorchester.	James Doherty.....	Sept. 9, 1913.	Unfinished.....	1,785 65	Nothing.
1, 2 Appian way, between Franklin and Raymond streets, Brighton.	John J. Lane.....	Sept. 9, 1913.	Completed Nov. 15, 1913....	1,713 66	\$1,714 89
1, 2, 4 Sheffield road, between Walter and Selwyn streets, West Roxbury.	William J. Rafferty Company....	Sept. 9, 1913.	Completed Nov. 28, 1913....	4,376 36	3,729 15
1, 3, 4 Spring street, between Webster street and Charles River, West Roxbury.	West Roxbury Trap Rock Company.	Sept. 29, 1913.	Unfinished.....	14,336 83	2,346 50
1, 2 Gayland street, between West Cottage and Judson streets, Roxbury.	James Doherty.....	Oct. 11, 1913.	Unfinished.....	3,249 15	Nothing.
1, 3 Wellington Hill street, between Blue Hill avenue and Morton street, Dorchester.	William J. Barry.....	Oct. 21, 1913.	Unfinished.....	22,227 50	Nothing.
1, 2, 4 Armington and Islington streets, between Webster street and Brighton avenue, Brighton.	A. J. & G. H. McMurtry.....	Oct. 24, 1913.	Unfinished.....	3,384 10	\$1,980 46
1, 3 Clermont street, between Bailey and Fuller streets, Dorchester.	James Doherty.....	Oct. 27, 1913.	Unfinished.....	1,483 70	Nothing.

¹ Advertised and awarded to lowest bidder.² Tar macadam.³ Asphalt macadam.⁴ Final payment not made.⁵ Streets laid out prior to 1891 never constructed.

Street Construction under Chapter 393 of the Acts of 1906. — *Concluded.*

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not including Materials Furnished by City.	Amount Expended in 1913.
1, 3 Audubon road, between Ivy and Mountfort streets, city proper.	Boston Paving Company.....	Oct. 29, 1913.	Completed Dec. 20, 1913....	\$2,588 25	\$2,522 59
1, 2, 4 Montebello road, between Washington street and Brookside avenue; Marion street, from Montebello road about 112 feet southwesterly; Haven street, from Montebello road about 100 feet southwesterly.	James Doherty.....	Oct. 31, 1913.	Unfinished.....	3,185 00 513 00 455 00	700 40
1, 3 Ballou avenue, between Woodrow avenue and Willowwood street, Dorchester.	Jeremiah J. McCarthy Company,	Nov. 10, 1913.	Not started.....	12,424 35	Nothing.
1, 2 Normandy street, between Creston and Intervale streets, Dorchester.	Hugh J. McGuire.....	Nov. 10, 1913.	Completed Dec. 23, 1913....	1,224 35	\$1,301 22
1, 2 Vassar street, between Washington and Kilton streets, Dorchester.	William J. Rafferty Company....	Nov. 10, 1913.	Not started.....	4,225 45	Nothing.
1, 2 Puritan avenue, between Richfield and an unnamed street, Dorchester.	William J. Rafferty Company....	Nov. 11, 1913.	Not started.....	3,738 83	Nothing.
1, 2 Marlowe street, between Vinson and Park streets, Dorchester.	Daniel E. Lynch.....	Nov. 15, 1913.	Not started.....	1,057 95	Nothing.
1, 3 Colonial avenue, between Talbot and New England avenues, Dorchester.	James Doherty.....	Nov. 19, 1913.	Not started.....	4,484 25	Nothing.
1, 2 Cottage and Lubec streets, between Gove and Porter streets, East Boston.	James Doherty.....	Nov. 19, 1913.	Not started.....	7,932 10	Nothing.
1, 2 St. Lukes road, between Brighton and Commonwealth avenues, Brighton.	William J. Rafferty Company....	Nov. 19, 1913.	Not started.....	3,232 92	Nothing.
1, 3 Binney street, between Longwood avenue and Francis street, Roxbury.	J. C. Copleman & Sons Company..	Nov. 28, 1913.	Not started.....	4,411 70	Nothing.
1, 2 Myrick street, between Easton street and Coolidge road, Brighton.	A. J. & G. H. McMurtry.....	Nov. 29, 1913.	Not started.....	1,063 37	Nothing.

1, 2 Rexhame street, between Belgrade and Colberg avenues, West Roxbury.	West Roxbury Trap Rock Company.	Nov. 29, 1913.	Not started.....	3,291 00	Nothing.
1, 2 Wilmore street, between Blue Hill avenue and Norfolk street, Dorchester.	James Doherty.....	Dec. 3, 1913.	Not started.....	2,213 20	Nothing.

¹ Advertised and awarded to lowest bidder.

² Tar macadam.

³ Asphalt macadam.

⁴ Final payment not made.

Paving and Regulating.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not including Materials furnished by City.	Amount Expended in 1913.
² West First street, between A street and railroad crossing, South Boston.	John E. Quinn.....	May 7, 1913.	Completed May 29, 1913....	\$5,193 50	\$5,475 85
¹ Sleeper street, from Congress street, about 650 feet northeasterly, South Boston.	John E. Quinn.....	June 3, 1913.	Completed Oct. 9, 1913....	9,037 00	9,351 93
¹ Providence street, from 70 feet east of Church street to Berkeley street, city proper.	Coleman Brothers.....	June 30, 1913.	Completed Aug. 21, 1913....	15,772 50	16,413 79
¹ Washington street, at and near Hyde Park avenue and Tower street, West Roxbury.	James Doherty.....	Aug. 4, 1913.	Completed Aug. 30, 1913....	3,587 74	3,743 78
¹ Fulton street, between Richmond and Lewis streets, city proper.	Boston Paving Company.....	Sept. 30, 1913.	Completed Nov. 5, 1913....	3,586 90	3,989 23

¹ Advertised and awarded to the lowest bidder.

² Advertised and awarded to the second lowest bidder.

Edgestones, Gutters, Crosswalks and Artificial Stone Sidewalks.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1 Woolson street, between Blue Hill avenue and Norfolk street, Dorchester.	Warren Brothers Company.....	May 9, 1913.	Completed Sept. 22, 1913....	\$3,632 00	\$3,892 70
1 Minot street, between Neponset avenue and Charlemont street, Dorchester.	D. M. Biggs & Co.....	May 14, 1913.	Completed July 10, 1913....	5,640 05	5,537 89
1 Evelyn street, between Blue Hill avenue and Norfolk street, Dorchester.	Central Construction Company....	May 15, 1913.	Completed Aug. 7, 1913....	2,162 75	2,217 46
1 Welles avenue, northerly side from Talbot avenue to opposite Harley street, Dorchester.	Robert Eager, Jr.....	May 26, 1913.	Completed July 11, 1913....	623 20	635 12
1 Howard street, between Gerard and Magazine streets, Roxbury.	Boston Paving Company.....	June 3, 1913.	Completed Sept. 26, 1913....	831 50	982 08
1 Armandine street, between Milton avenue and Washington street, Dorchester.	Jeremiah J. McCarthy Company,	June 3, 1913.	Completed Aug. 25, 1913....	4,388 55	4,978 28
1 Dennis street, between Dudley and Woodville streets, Roxbury.	James Doherty.....	June 9, 1913.	Completed July 16, 1913....	2,352 40	2,311 26
1 Dudley street, between Washington street and Harrison avenue, Roxbury.	Robert Eager, Jr.....	June 9, 1913.	Completed Aug. 13, 1913....	941 00	1,295 10
1 Nightingale street, northerly side between Wales street and Talbot avenue, Dorchester.	Warren Brothers Company.....	June 9, 1913.	Completed Aug. 27, 1913....	669 05	666 81
1 Withington street, between Norfolk and Torrey streets, Dorchester.	W. A. Murtfeldt Company.....	June 27, 1913.	Completed Nov. 21, 1913....	1,618 70	1,574 11
1 Pope's Hill street, between Neponset avenue and Freeport street, Dorchester.	Jeremiah J. McCarthy Company,	June 27, 1913.	Completed Nov. 28, 1913....	1,250 35	1,203 43
1 Dorchester avenue, easterly side, between Bel- fort and St. William streets; Hollander street, from Humboldt avenue, about 200 feet west- erly, and Rosedale street at Nos. 7, 9, 10 and 12, Dorchester.	William J. Rafferty Company....	June 27, 1913.	Completed Aug. 26, 1913....	942 60	988 75

Walnut street, between Franklin and Ericson streets, Dorchester.	D. M. Biggs & Co.....	July 2, 1913.	Completed Sept. 22, 1913....	4,346 19	4,505 35
Massachusetts avenue, westerly side, between N. E. R. Bridge and Columbia road, Dorchester.	James Doherty.....	July 10, 1913.	Completed Aug. 19, 1913....	4,643 50	6,155 12
Alban street, between Welles avenue and Ashmont street, Dorchester.	James Doherty.....	July 10, 1913.	Completed Aug. 2, 1913.....	2,362 78	2,514 76
Park street, westerly side, between Clement and Anawan avenues, West Roxbury.	W. A. Murfieldt Company.....	July 12, 1913.	Completed Nov. 21, 1913....	1,488 45	2,327 50
Tremont street, westerly side, from St. Alphonsus street, about 350 feet easterly, and St. Alphonsus street, easterly side, between Tremont and Smith streets, Roxbury.	John McCourt & Co.....	July 18, 1913.	Completed Aug. 9, 1913.....	1,079 45	1,114 84
Minot street, between Charlemont and Adams streets, Dorchester.	David M. Biggs & Co.....	July 28, 1913.	Completed Sept. 23, 1913....	2,668 40	2,839 53
Cohasset street, between Corinth and Albano streets, West Roxbury.	Martino De Matteo.....	July 28, 1913.	Completed Aug. 28, 1913....	1,711 30	1,644 59
Elmo street, between Blue Hill avenue and Erie street, Dorchester.	James Doherty.....	July 28, 1913.	Completed Oct. 21, 1913....	1,506 98	1,626 27
Germania street, between Boylston and Bismarck streets, West Roxbury.	John McCourt & Co.....	July 28, 1913.	Completed Nov. 15, 1913....	2,109 70	2,209 85
Bernard street, between Harvard and Kerwin streets, Dorchester.	Thomas J. Hind Company.....	Aug. 4, 1913.	Completed Sept. 6, 1913....	2,292 35	2,287 33
Conway street, between South and Fairview streets, and Fairview street, southerly side, from Conway street about 350 feet easterly, West Roxbury.	Martino De Matteo.....	Aug. 4, 1913.	Completed Nov. 1, 1913....	2,778 01	2,769 39
Franklin street, easterly side, between Lincoln and Easton streets, and Alcott street, southerly side, from Franklin street about 100 feet easterly.	John J. Lane.....	Aug. 11, 1913.	Completed Sept. 10, 1913....	997 90	1,065 75
Westville street, between Geneva avenue and Draper street, Dorchester.	William J. Rafferty Company.....	Aug. 15, 1913.	Completed Oct. 4, 1913....	1,764 47	2,784 47

¹ Advertised and awarded to the lowest bidder.

Edgestones, Gutters, Crosswalks and Artificial Stone Sidewalks.—*Concluded.*

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
¹ Washington street, between State and Boylston streets, city proper.	Warren Brothers Company	Sept. 8, 1913.	Completed Oct. 2, 1913. . . .	\$786 00	\$788 80
² Tremont street, easterly side, between Winter street and Hamilton place, city proper.	Warren Brothers Company	Sept. 10, 1913.	Completed Oct. 24, 1913. . . .	496 00	996 73
¹ Blue Hill avenue, easterly side, from Washington street about 192 feet southerly, Dorchester.	Robert Eager, Jr.	Sept. 12, 1913.	Completed Oct. 27, 1913. . . .	505 70	518 90
¹ Inwood street, between Olney and Norton streets, Dorchester.	Connolly and Diamond	Oct. 9, 1913.	Completed Oct. 24, 1913. . . .	337 79	352 65
¹ Greenwood street, between Elmo and Erie streets, Dorchester.	James Doherty	Oct. 11, 1913.	Completed Oct. 27, 1913. . . .	394 70	399 39

¹ Advertised and awarded to lowest bidder.² Not advertised, only bid.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
¹ Repairing artificial stone sidewalks on any street within the city limits.	Jeremiah J. Sullivan	Feb. 4, 1913.	Completed Jan. 31, 1914.	Less than 20 square feet, \$2.75 lump sum; 20 to 100 square feet, \$0.18 per square foot; 100 to 300 square feet, \$0.17 per square foot; 300 to 500 square feet, \$0.12 per square foot; 500 to 700 square feet, \$0.11 per square foot; 700 and less than 900 square feet, \$0.11 per square foot; 900 square feet and over, \$0.11 per square foot.	\$4,229 92

PUBLIC WORKS DEPARTMENT.

35

¹ Teaming edgestones and flagging from the South End Yard of the Highway Division, 636 Albany street, to any street in the city.	S. & R. J. Lombard.....	Feb. 8, 1913.	Completed Jan. 31, 1914.	Streets in Hyde Park, \$0.10 per linear foot; all other districts, \$0.08 per linear foot.	1,161 21
² Leasing Chestnut Hill avenue crusher for the purpose of quarrying stone.	Rowe Contracting Company,	Feb. 8, 1913.	Completed Jan. 31, 1914.	\$2,500	1,362 45
³ Rebuilding face of wharf, Paving Service Yard, Albany street.	Lawler Brothers.....	March 10, 1913.	Completed March 26, 1913.	\$950	950 00
³ Extending sidewalk on Condor street, East Boston.	George T. Rendle.....	April 5, 1913.	Completed April 22, 1913.	\$138	138 00
¹ Rebuilding cap of bulkhead, L street, South Boston.	W. H. Ellis.....	May 1, 1913.	Completed May 16, 1913.	\$595	595 00
¹ Building wooden steps at Hancock street, Paving Service, Dorchester.	Thomas H. Hanlon.....	May 20, 1913.	Completed June 23, 1913.	\$971	971 00
⁴ Completing drainage system, Rutherford avenue stable, Sanitary Service, Charlestown.	James J. Brock.....	May 22, 1913.	Completed July 25, 1913.	\$237 70	237 70
¹ Excavating and grading Walnut avenue, easterly side, from Iffley road to beyond Montebello road, West Roxbury.	John McCourt & Co.....	June 13, 1913.	Completed Aug. 1, 1913.	\$782.50	696 25
³ Repairing tar concrete sidewalk, Holbrook street, Jamaica Plain.	H. F. Armington Company..	July 7, 1913.	Completed July 25, 1913.	\$240	329 95
³ Painting buildings and whitewashing stable, North End Paving Service.	Thomas F. Sullivan.....	Aug. 20, 1913.	Completed Aug. 21, 1913.	\$370	390 00
¹ Building concrete wall, Summer street, northerly side, between B street and viaduct, South Boston.	McCarthy & Walsh.....	Nov. 5, 1913.	Completed Dec. 19, 1913.	\$7,326	7,294 45
³ Resurfacing Rose street, between Harrison avenue and Albany st.	Independent Coal Tar Co. . .	Nov. 11, 1913.	Completed Nov. 21, 1913.	\$660	652 20
⁶ Furnishing and installing heating system, Brighton Yard Paving Service, Chestnut Hill avenue.	Charles B. Collar.....	Nov. 14, 1913.	Completed Dec. 9, 1913.	\$195.50	208 50

¹ Advertised and awarded to lowest bidder.
⁴ Invitation bid, awarded lowest bidder.

² Paid to city.
³ Invitation bid, awarded highest bidder.

³ Only bid not advertised.
³ Invitation bid, awarded highest bidder.

HIGHWAY DIVISION.—SANITARY SERVICE. Collecting and Removing House Offal.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended 1912 Contract.	Amount Expended 1913 Contract.
¹ East Boston district.....	John T. Lane.....	Feb. 3, 1913...	Jan. 31, 1914.....	\$7,500 00	\$452 82	\$6,768 50
¹ Brighton district.....	Northern Construction Company,	Feb. 3, 1913...	Jan. 31, 1914.....	8,400 00	533 50	7,630 00
^{1, 2} West Roxbury district.....	Municipal Supplementary Service Company.	Feb. 3, 1913....	Jan. 31, 1914.....	2,880 00	269 50	737 00
¹ West Roxbury district.....	P. J. Reid Corporation.....	June 13, 1913..	Jan. 31, 1914.....	3,750 00	.....	3,801 75

¹ Advertised and awarded to lowest bidder.

² Contract canceled, readvertised and awarded to P. J. Reid Corporation June 13, 1913.

Collecting and Removing Ashes and Offal.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended 1912 Contract.	Amount Expended 1913 Contract.
¹ Dorchester district.....	John J. Loonie.....	Feb. 3, 1913....	Jan. 31, 1914.....	\$73,680 00	\$4,463 80	\$67,018 50

¹ Advertised and awarded to the lowest bidder.

Collecting and Removing Ashes.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1912.	Amount Expended in 1913.
¹ East Boston district.....	Agostino De Stefano.....	Feb. 3, 1913. . .	Jan. 31, 1914.....	\$10,800 00	\$1,054 16	\$9,890 00
¹ Brighton district.....	Joseph McGreevey.....	Feb. 3, 1913. . .	Jan. 31, 1914.....	10,740 00	1,089 00	9,786 40
¹ West Roxbury district.....	John J. Moore.....	Feb. 3, 1913. . .	Jan. 31, 1914.....	7,680 00	734 00	7,065 25
¹ Hyde Park district.....	M. McGinnis.....	Feb. 3, 1913. . .	Jan. 31, 1914.....	4,788 00	385 00	4,349 10

¹ Advertised and awarded to lowest bidder.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
² Removing manure from the various yards and stables.	Joseph A. Kelley.....	Jan. 16, 1913.	Completed Jan. 31, 1914.....	³ \$1 00	\$1,200 88
⁴ Galvanized sheet metal cover plates for I beams at the Port Hill Wharf and Albany and South Streets Receiving Stations.	H. P. Converse & Co.....	Feb. 17, 1913.	Completed May 8, 1913.....	930 00	930 00
⁵ Taking down and removing temporary runway and platform, Hecht's Wharf.	Lawler Bros.....	June 14, 1913.	Completed May 15, 1913.....	356 00	358 37
^{1, 6} Furnishing odor condenser at Spectacle Island....	⁶ Spray Engineering Company.....	July 28, 1913.	.....	⁶ 2,800 00	

¹ Not advertised, only bid.⁴ Invitation bids, awarded to lowest bidder.² Advertised and awarded to highest bidder.⁵ Paid to city.³ Per horse per year paid to city.⁶ Paid by Boston Development and Sanitary Company.

Contracts in Force Made in Previous Years.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
Disposal of refuse for ten years.....	Boston Development and Sanitary Company.	Feb. 1, 1912.	Unfinished.....	\$1 432,000 00	\$112,652 47

HIGHWAY DIVISION.—STREET CLEANING AND OILING SERVICE.
Furnishing Carts for Watering and Oiling Streets,

DISTRICT.	Awarded to	Dated.	Progress of Work.	Price per Cart per Day.		Amount Expended in 1913.
				Two-horse.	Three-horse.	
1 No. 2, East Boston and Breed's Island,	Agostino DeStefano.....	March 19, 1913.	Completed Dec. 1, 1913.....	\$5 20	.....	\$3,906 50
1 No. 3, Charlestown.....	J. P. O'Riorden	March 19, 1913.	Completed Dec. 1, 1913.....	5 35	.....	4,728 75
1 No. 5, West Roxbury.....	M. McGinnis & Co.....	March 19, 1913.	Completed Dec. 1, 1913.....	5 49	\$6 50	4,946 89
1 No. 6 and 9, Dorchester and Ashmont,	Patrick J. Lyons.....	March 19, 1913.	Completed Dec. 1, 1913.....	5 25	8 00	12,136 48
1 No. 7, Roxbury South and Jamaica Plain.	Joseph McGreevey.....	March 19, 1913.	Completed Dec. 1, 1913.....	5 38	6 38	9,495 71
1 No. 8, South End and Roxbury North,	Joseph Sprissler	March 19, 1913.	Completed Dec. 1, 1913.....	5 45	6 00	14,729 32

Advertised and awarded to lowest bidder.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
² Lease of land and buildings, 245-249 Rutherford avenue, Charlestown.	Timothy F. Callahan.....	Jan. 31, 1913.	Completed Jan. 31, 1914.....	* 600 00	
Lease of building, 47 Winchester street.....	Eleanor W. Daggett.....	Feb. 1, 1913.	Completed Jan. 31, 1914.....	* 600 00	
¹ Repairing roof of stable, North Grove street.....	William Martin.....	June 2, 1913.	July 14, 1913.....	\$100 00	\$100 00
¹ Painting stable, Highland street yard.....	John J. Gately.....	Oct. 9, 1913.	Dec. 8, 1913.....	85 00	85 00

* Per year.

¹ Not advertised, only bid.² Paid to city.

Removal of Snow and Ice.

District.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
¹ Snow District No. 1.....	J. C. Coleman & Sons Company..	Nov. 20, 1913.	Expires May 1, 1914.....	\$0 43 per cubic yard....	\$481 60
¹ Snow District No. 2.....	Joseph McGreevey.....	Nov. 20, 1913.	Expires May 1, 1914.....	0 44 per cubic yard....	Nothing.
¹ Snow District No. 3.....	Charles J. Jacobs Company.....	Nov. 20, 1913.	Expires May 1, 1914.....	0 47 per cubic yard....	\$772 68
¹ Snow District No. 4.....	Coleman Brothers.....	Nov. 21, 1913.	Expires May 1, 1914.....	0 42 per cubic yard....	1,512 18
¹ Snow District No. 5.....	Coleman Brothers.....	Nov. 21, 1913.	Expires May 1, 1914.....	0 49 per cubic yard....	
¹ Snow District No. 6.....	Joseph M. Kiley.....	Nov. 21, 1913.	Expires May 1, 1914.....	0 50 per cubic yard....	Nothing.

¹ Advertised and awarded to the lowest bidder.

SEWER AND WATER DIVISION.—SEWER SERVICE.
Cleaning Catch-basins.

Division.	Awarded to	Dated.	Progress of Work.	Price per Basin.	Amount Expended in 1913.
¹ No. 1, North of Dover and Berkeley streets to the water front and East Boston and Charlestown.	John W. Collins.....	Feb. 1, 1913.	Jan. 31, 1914.....	North of Dover street, \$4 25	\$14,245 74
				East Boston..... 3 78	
				Charlestown..... 4 00	
				West Roxbury..... 2 89	
				Dorchester..... 2 99	
No. 3, West Roxbury, Dorchester and Hyde Park.				Hyde Park..... 3 25	
¹ No. 2, South of Dover and Berkeley streets, South Boston and Brighton.	John J. Loonie.....	Feb. 3, 1913.	Jan. 31, 1914.....	South of Dover street.. \$3 50	8,075 02
				South Boston..... 3 50	
				Brighton..... 3 00	

¹ Advertised and awarded to the lowest bidder.

Cleaning Sewers.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
¹ Newcomb street, Bradford street and Rochester street, city proper, and Newman street, Roxbury.	James L. Pierce.....	Feb. 14, 1913.	Completed Feb. 24, 1913....	\$545 61	\$1,066 44
Public alley No. 44, passageway between St. Botolph street and N. Y., N. H. & H. R. R., from 75 feet southwest of Albemarle street to 115 feet northeast of Durham street; passageway between St. Botolph street and N. Y., N. H. & H. R. R., from 105 feet southwest of Follen and Garrison streets; South Margin street, between Hale and Stanford streets, city proper.	James L. Pierce.....	April 18, 1913.	Completed May 19, 1913....	469 20	479 28
¹ Columbus avenue, from Roxbury Crossing, 150 feet beyond Station street; Tremont street, Linden Park street to Roxbury Crossing, Roxbury.	James L. Pierce.....	April 25, 1913.	Completed May 29, 1913....	573 12	541 48
¹ Main street, between Park street and Hancock square, Charlestown.	James L. Pierce.....	May 20, 1913.	Completed June 30, 1913....	1,533 70	1,549 38
¹ A streets, between West Fourth and West Fifth streets; C street, between Broadway and West Fifth street; D street, between West Fourth street and Broadway; West Fourth street, between railroad bridge and Dorchester avenue; Gold street, between railroad bridge and A street; Gold street, between B and C streets; West Sixth street, between E and D streets, South Boston.	Richard A. Nagle.....	June 3, 1913.	Completed Aug. 23, 1913....	705 36	758 76
¹ Washington street, between Roslin and Euclid streets, Dorchester; Washington street, westerly side, between Brattle and Hanover streets; Portland street siphon; Hanover street, between Portland and Washington streets, city proper.	James L. Pierce.....	June 3, 1913.	Completed Aug. 16, 1913....	367 56	373 50

¹ Advertised and awarded to the lowest bidder.

Cleaning Sewers.—*Concluded.*

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
¹ Commercial street, between Hanover and Battery streets, city proper.	James L. Pierce.....	June 19, 1913.	Completed July 24, 1913...	\$100 21	\$2,141 66
¹ Bennington street, southerly side, between Swift and Moore streets, and Chelsea street, between Wesley street and Day square, East Boston.	James L. Pierce.....	July 11, 1913.	Completed Aug. 30, 1913...	2,104 31	2,249 54
¹ West First street, between D and Dorchester streets; East Second street, between Dorchester and H streets; H street, between East Second, and East First streets, and East First, between H and L streets, South Boston.	James L. Pierce.....	July 17, 1913.	Completed Nov. 17, 1913...	1,653 54	1,656 86
^{1, 2} Chambers street, between Brighton and Charles streets; Commercial street and Atlantic avenue, between Battery and Clinton streets, city proper.	James L. Pierce.....	Aug. 25, 1913.	Unfinished.....	1,833 70	168 27
^{1, 2} Portland street, between Hanover and Market streets, and between Traverse and Causeway streets; Market street, between Portland and Canal streets; Canal street, between Causeway street and Haymarket square; Traverse street, between Portland and Canal streets; Haverhill street, between Causeway and Traverse streets; Cross street, between Haymarket square and Endicott street; Blackstone street, between Hanover and Cross streets; Canal street, relief sewer in Traverse and Haverhill streets, Haymarket square, Stillman, Endicott and Cross streets to Hanover street, city proper.	James L. Pierce & Co....	Sept. 2, 1913.	Unfinished.....	6,942 27	3,906 96

¹ Advertised and awarded to the lowest bidder.² Final payment not made.

Furnishing and Driving Piles for Sewerage Works.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
¹ Northern avenue, from D street extension to about 600 feet easterly, South Boston.	W. S. Rendle.....	Feb. 8, 1913.	Completed May 14, 1913....	\$1,099 50	\$1,254 75
¹ Sleeper street, from Congress street about 630 feet northerly, South Boston.	Rendle & Stoddard.....	May 17, 1913.	Completed Sept. 11, 1913....	1,423 20	1,569 90
^{1, 2} Geneva street, between Porter and Gove streets, East Boston.	W. S. Rendle.....	Oct. 17, 1913.	Unfinished.....	660 00	675 44

¹ Advertised and awarded to lowest bidder.² Final payment not made.

Sewerage Works.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials furnished by City.	Amount Expended in 1913.
1, 2 Spring, Baker and Gardner streets, between Charles river and Hildum street, West Roxbury.	West. Roxbury Trap Rock Company.	Feb. 6, 1913.	Completed Dec. 18, 1913.....	\$36,848 50	\$36,128 50
1 Line street, between Brimmer and River streets, city proper.	Anthony Baruffaldi.....	April 4, 1913.	Completed May 10, 1913.....	1,853 15	1,841 20
1 Helena road, between Burgoyne and Adams streets, Dorchester.	George J. Regan.....	April 4, 1913.	Completed May 3, 1913.....	817 52	679 72
1 Frankfort street, between Prescott street and point about 200 feet southwesterly, East Boston.	McCarthy & Walsh.....	April 10, 1913.	Completed May 5, 1913.....	1,018 70	1,416 90
1 Vesta road and Harvard street and catch-basin in Bentham road, Quincefield street, Pluisted road and Duves street, Dorchester and Mitchell streets, South Boston.	George J. Regan.....	April 18, 1913.	Completed June 13, 1913.....	2,381 10	3,374 57
1 South street, between St. Joseph street and Arborway and outlet in Spalding street, West Roxbury.	Antony Cefalo.....	April 21, 1913.	Completed June 28, 1913.....	5,591 35	6,963 08
1 Montclair avenue, between Merlin and Centre streets, West Roxbury.	William L. Dolan.....	April 22, 1913.	Completed Aug. 5, 1913.....	4,199 50	7,283 99
1 Neponset Playground, between N. Y., N. H. & H. R. R. and Neponset avenue, Dorchester.	McCarthy & Walsh.....	April 28, 1913.	Completed July 31, 1913.....	21,550 45	22,567 95
1 Don street, between Callender street and Woodrow avenue, Dorchester.	Louis Balboni.....	May 2, 1913.	Completed May 13, 1913.....	345 14	367 27

1 Downer avenue, from existing sewer west- erly to Sawyer avenue, Dorchester.	Daniel Di Pietro.....	May 9, 1913.	Completed June 10, 1913.....	660 10	742 64
1 Tesla and Burnah streets and Edgewater drive, Dorchester, and Wood avenue, River, Baldwin and Blake streets, Hyde Park.	James H. Ferguson.....	May 10, 1913.	Completed July 24, 1913.....	7,341 00	9,336 50
1, 2 Pinchurst area, Hyde Park.....	Peter W. Hill.....	June 3, 1913.	Unfinished.....	35,619 65	35,144 64
1 Cliftondale street, between Kittredge and Norfolk streets, West Roxbury.	William L. Dolan.....	June 4, 1913.	Completed July 28, 1913.....	559 31	812 11
1 Norfolk street, from N. Y., N. H. & H. R. R. to Walk Hill street, Dorchester.	George J. Regan.....	June 5, 1913.	Completed July 14, 1913.....	1,749 04	4,637 75
1 Alberta street, between Centre street and N. Y., N. H. & H. R. R., West Roxbury.	Antony Cefalo.....	June 11, 1913.	Completed Aug. 18, 1913.....	1,451 09	2,078 20
1 Walworth street, between Brook street and Belgrade avenue, West Roxbury.	William L. Dolan.....	June 11, 1913.	Completed Aug. 8, 1913.....	2,268 28	3,280 60
1 Crossman street, between Norfolk and West Selden streets, Dorchester.	Timothy Coughlin.....	June 12, 1913.	Completed July 30, 1913.....	3,053 21	1,762 49
1, 2 Bowdoin street, between Hamilton and Olney streets and between Corona and Westville streets, Dorchester, and catch- basins in Bourneside street, Dorchester, Howard, Sussex and Tremont streets, Roxbury.	Anthony Baruffaldi.....	June 12, 1913.	Completed Dec. 8, 1913.....	5,536 95	5,687 52
1 Adams street, from Leedsville street about 229 feet northerly, Dorchester.	George J. Regan.....	June 23, 1913.	Completed July 17, 1913.....	503 55	538 78
1 Seaver street, from Humboldt avenue to a point 232 feet northerly, Roxbury.	George J. Regan.....	June 23, 1913.	Completed Aug. 9, 1913.....	1,643 00	1,735 02
1 Wildwood street, between Middleton and Morton streets, Dorchester.	George J. Regan.....	June 23, 1913.	Completed July 24, 1913.....	854 66	2,845 50
2 Palfrey street, northerly branch, between Brown avenue and N. Y., N. H. & H. R. R. and Grandview street, from Beech street to a point 150 feet southwesterly, West Roxbury.	Anthony Cefalo.....	July 11, 1913.	Completed July 23, 1913.....	491 06	476 04

Sewerage Works.—Continued.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
¹ Vale street, between La Grange street and a point 240 feet southwesterly, and Walker street, between Weld street and old sewer 76 feet northerly, West Roxbury.	Antony Cefalo.....	July 17, 1913.	Completed Sept. 2, 1913.....	\$785 19	\$1,229 67
¹ Water street, Metropolitan avenue, Highland street, Bridge street and Summit street, Hyde Park.	Antony Cefalo.....	July 17, 1913.	Completed Aug. 21, 1913.....	1,465 01	1,553 55
¹ Oakland street, between Faneuil and Washington streets, Brighton.	William L. Dolan.....	July 28, 1913.	Completed Oct. 18, 1913.....	9,893 40	9,951 32
^{1, 2} Anawan avenue, West Roxbury Parkway, Martin street and Stratford street, between N. Y., N. H. & H. R. R. and a point on Stratford street 220 feet east of Pelton street, West Roxbury.	The Henry Spinach Contracting Company.	Aug. 7, 1913.	Unfinished.....	38,315 50	28,259 64
¹ Train street, between Ashmont street and South Munroe terrace, Dorchester.	George J. Regan.....	Aug. 9, 1913.	Completed Sept. 12, 1913.....	773 20	841 35
^{1, 2} Pleasant street, between Eliot and Washington streets, city proper.	Antony Cefalo.....	Aug. 13, 1913.	Unfinished.....	15,958 50	13,521 13
¹ Calumet street, between Hillside street and Parker Hill avenue, Roxbury.	George J. Regan.....	Aug. 15, 1913.	Completed Sept. 4, 1913.....	1,018 70	1,198 25
^{1, 2} Williams street, between Washington and Call streets and outlet in Washington street to Stony brook conduit, West Roxbury.	Antony Cefalo.....	Aug. 18, 1913.	Completed Dec. 18, 1913.....	8,176 28	9,043 96
^{1, 2} South End Sewer Improvement, Section 2, in Clarendon street, Buckingham street, Warren avenue, Chandler street, Union park, Montgomery street, Dartmouth street, and West Canton street, city proper.	Antony Cefalo.....	Aug. 25, 1913.	Unfinished.....	56,349 25	41,555 95

1, 2 Wellington Hill street, and outlets in Gilmer and Morton streets, Dorchester.	M. De Sisto & Co.	Sept. 6, 1913.	Completed Dec. 11, 1913.	7,251 43	6,411 91
1 Dorechester avenue, from Freeport street, Brook to Roach street, and Roach street, between Dorchester avenue and Pleasant street, Dorchester.	Anthony Baruffaldi.	Sept. 8, 1913.	Completed Nov. 15, 1913.	3,878 95	4,191 48
1 Sheffield road, between Selwyn and Walter streets, West Roxbury.	George J. Regan.	Sept. 9, 1913.	Completed Sept. 27, 1913.	399 45	458 34
1 Preston road, between Pleasant street and Chapin avenue, West Roxbury.	Charles Latorolla.	Sept. 9, 1913.	Completed Sept. 30, 1913.	607 65	599 31
1 Oak Grove terrace, between Ruggles street and Auburn place, Roxbury.	George J. Regan.	Sept. 16, 1913.	Completed Oct. 9, 1913.	963 95	1,459 77
1 Parker street, between Wood avenue and Oakwood street, Hyde Park.	Charles Latorolla.	Sept. 20, 1913.	Completed Oct. 23, 1913.	179 72	594 03
1 Dorechester avenue, between Brook and Codman streets, Dorchester.	George J. Regan.	Sept. 27, 1913.	Completed Oct. 18, 1913.	602 80	664 65
1 Standard street, from River street 932 feet northerly, Dorchester.	George J. Regan.	Oct. 2, 1913.	Completed Nov. 22, 1913.	1,354 22	2,941 55
1 Harrison park, from Beach street to the end, and Beach street, from Harrison park 250 feet northeasterly, Dorchester.	Louis Balboni.	Oct. 9, 1913.	Completed Oct. 30, 1913.	623 10	699 84
1 Hallet-Davis street and outlet in Marsh street extended, Dorchester.	Louis Balboni.	Oct. 17, 1913.	Completed Nov. 20, 1913.	1,303 40	1,087 11
1 South End Sewer Improvement, Section 4, in Union Park street, Albany street and Gately wharf, city proper.	William J. Barry.	Oct. 21, 1913.	Unfinished.	25,422 50	Nothing.
1 Centre street, between Spring and Cass streets, West Roxbury.	William L. Dolan.	Oct. 21, 1913.	Unfinished.	4,065 40	3,881 95
2, 3 Hyde Park avenue, between Mother brook and Factory street, Hyde Park.	Martino De Matteo.	Oct. 29, 1913.	Completed Feb. 3, 1914.	3,883 10	2,880 32
1, 2 Dorechester avenue, between Roach street and Savin Hill avenue, Dorchester.	R. Cartullo.	Oct. 31, 1913.	Unfinished.	3,217 20	2,774 57

Sewerage Works.—*Concluded.*

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
^{1, 2} Commonweath avenue, between Thorn-dike street and St. Lukes road, and St. Lukes road, between Commonweath and Brighton avenues, Brighton.	Giuseppe Bevilacqua.....	Nov. 9, 1913.	Unfinished.....	\$4,738 00	\$3,979 75
^{1, 2} Ballou avenue and outlets in Woodrow avenue and Lyons street, Dorchester.	George J. Regan.....	Nov. 11, 1913.	Unfinished.....	6,052 02	6,156 60
^{1, 2} Poplar street, between Hilburn street and point 300 feet southeasterly, West Roxbury.	Timothy Coughlin.....	Nov. 20, 1913.	Unfinished.....	751 00	775 62
^{1, 2} Montebello road, between Brookside avenue and Washington street, West Roxbury.	Louis Balboni.....	Nov. 20, 1913.	Completed Dec. 11, 1913.....	1,073 70	897 39
^{1, 2} L street, between Columbia road and East Ninth street, South Boston.	Louis Balboni.....	Nov. 28, 1913.	Completed Jan. 1, 1914.....	529 80	915 17
^{1, 2} Warren avenue, Water street, Station street and private land, near Fairmount avenue, Hyde Park.	Martino De Matteo.....	Nov. 28, 1913.	Unfinished.....	2,104 58	1,983 36
^{1, 2} Reservoir road, between Beacon street and B. & A. R., Brighton.	Louis Balboni.....	Nov. 29, 1913.	Unfinished.....	883 20	753 30
¹ Mattapan brook in Astoria street and private land, between Norfolk and Delhi streets, and Delhi street, between Holborn and Crossman streets, Dorchester.	Charles Latorella.....	Dec. 12, 1913.	Unfinished.....	16,135 15	Nothing.
¹ Davenport brook in private land, between Burt and Washington streets, Dorchester.	Anthony Baruffaldi.....	Dec. 23, 1913.	Unfinished.....	7,048 40	Nothing.
¹ Munson street, between Beacon street and B. & A. R., city proper.	John McCourt & Co.....	Jan. 2, 1914.	Unfinished.....	973 50	Nothing.

¹ Advertised and awarded to lowest bidder.² Final payment not made.³ Advertised and awarded to second lowest bidder.

Pumping Station, Calf Pasture.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1, 4 Building cast-iron floor, stairway, etc.	W. A. Snow Iron Works.....	April 10, 1913.	Unfinished.....	\$3,486 00	\$1,969 11
1 Reconstructing roof over turbine room.....	E. Van Noorden & Co.....	Aug. 27, 1913.	Completed Oct. 1, 1913.....	2,185 00	2,359 00
2 Furnishing and installing pipe fittings, etc., necessary to make connection with feed water heater.	The William H. Gallison Company.	Sept. 10, 1913.	Completed Oct. 30, 1913.....	600 00	592 16
3 Repairing boiler No. 1.....	The Hodge Boiler Works.....	Oct. 18, 1913.	Completed Dec. 7, 1913.....	629 00	629 00
2 Repairing boiler No. 4.....	The Hodge Boiler Works.....	Jan. 1, 1914.	Unfinished.....	644 00	Nothing.

¹ Advertised and awarded to the lowest bidder.² Not advertised, award to only bidder.³ Invitation bid, award to lowest bidder.⁴ Final payment not made.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
¹ Building underground sewage Pumping station in Summer street, opposite E street, South Boston.	Anthony Baruffaldi.....	Feb 25, 1913.	Completed Sept. 6, 1913.	\$5,465.....	\$6,205 41
Permission to pass under the tracks of the N. Y., N. H. & H. R. R. Co., near Forest Hills Station, for the purpose of constructing a sewer, West Roxbury.	N. Y., N. H. & H. R. R. Co.....	May 17, 1913.	.....	City to pay all costs of supporting and guarding tracks and roadbed and all expense occasioned by its maintenance or repairing.	
Lease of land and building, Gainsborough street and St. Botolph street extension.	Boston Elevated Railway Company.	May 26, 1913.	Completed Jan. 31, 1914.	\$1,250 per year.....	1,249 92
⁴ Dredging Roxbury canal.....	Eastern Dredging Company.....	May 28, 1913.	Completed July 21, 1913.	\$125 per day.....	1,975 00
² Purchase and removal of buildings on land of the City of Boston at Union park and Albany street, city proper.	David Grossman.....	June 13, 1913.	Completed Aug. 6, 1913.	\$25.....	25 00
¹ Furnishing and delivering sluice gates and compressed air rams at Moon Island.	Coffin Valve Company.....	June 27, 1913.	Completed Nov. 14, 1913.	\$7,625.....	7,625 00
¹ Furnishing and erecting automatic electric sewage pumping plant in proposed pumping station in Union Park and Albany streets, city proper.	Epping-Carpenter Pump Company.	July 28, 1913.	Unfinished.	\$34,836.....	Nothing.
⁶ Furnishing and delivering sluice gates and compressed air rams at Moon Island.	Coffin Valve Company.....	July 31, 1913.	Completed Nov. 14, 1913.	\$3,500.....	3,500 00
⁶ Furnishing gratings, Summer street pumping station.	New England Bolt and Steel Company.	Aug. 2, 1913.	Completed July 18, 1913.	\$140.....	\$140 00

¹ Supporting buildings on line of proposed sewer in passageway between Massachusetts avenue and Dartmouth street, city proper.	Isaac Blair & Co., Inc.....	Oct. 7, 1913.	Unfinished.	\$5,000.....	Nothing.
² Installing electrical system, Albany street yard.	Herbert S. Potter.....	Nov. 10, 1913.	Completed Dec. 31, 1913.	\$525.....	\$525 00
³ Building shaft house over east shaft, Squantum.	MacKenzie & Temple.....	Nov. 19, 1913.	Unfinished.	\$2,592.....	850 00
⁴ Building catch-basins, Normandy and Intervale streets, Dorchester.....	Hugh J. McGuire.....	Nov. 29, 1913.	Completed Dec. 17, 1913.	\$170.....	194 97

¹ Advertised and awarded to the lowest bidder.² Paid to city.³ Advertised and awarded to the highest bidder.⁴ Only bid, not advertised.

SEWER AND WATER DIVISION.—WATER SERVICE.
Water Pipes.—Laying.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1913.
² Berkeley street, city proper.....	Louis Balboni.....	Feb. 14, 1913.	Completed March 13, 1913..	\$475 50	\$634 91
¹ Elkins and Ticknor streets, South Boston; Frankfort street, East Boston; Commonwealth avenue, Brighton; Murray Hill road, West Roxbury; Hendry and Intervale streets, Dorchester, and Milton street, Hyde Park.	R. Cartullo.....	Mar. 5, 1913.	Completed April 30, 1913...	1,625 25	1,769 18
¹ Ferry, Fulton and Richmond streets and Eastern avenue, city proper.	John T. Shea, Jr.....	April 10, 1913.	Completed April 26, 1913....	1,164 00	1,347 22
^{1, 4} Various streets in Dorchester, West Roxbury and Hyde Park.	M. DeSisto & Co.....	April 21, 1913.	Completed Dec. 8, 1913.....	23,310 00	24,349 94
¹ Arlington, Clarendon and Stuart streets, city proper.	Thomas Burke.....	April 25, 1913.	Completed May 14, 1913....	1,012 75	561 48
¹ Brainerd road, Commonwealth avenue, Dustin street, Long avenue, Strathmore road, Washington street, Brighton.	R. Cartullo.....	May 1, 1913.	Completed July 2, 1913.....	1,473 70	2,286 01
¹ Bynner street, Roxbury; Avon street, Dix place, India street and India square, city proper.	Hugh McNulty.....	May 12, 1913.	Completed July 28, 1913....	977 00	824 81
¹ Green, Lyman and Staniford streets, city proper.	Charles M. Callahan.....	June 3, 1913.	Completed June 18, 1913....	615 00	686 65
² Providence street, between Park square and Arlington street, city proper.	John T. Shea, Jr.....	June 5, 1913.	Completed June 16, 1913....	346 00	598 48
² Providence street, between Arlington and Berkeley streets, city proper.	John T. Shea, Jr.....	June 12, 1913.	Completed July 5, 1913.....	547 00	862 94

¹ Commonwealth and Maple avenues, Nonantum and St. Lukes roads, Brighton; Howland street, Roxbury; Beacon street, city proper.	Hugh McNulty.....	July 11, 1913.	Completed Aug. 16, 1913....	1,145 20	1,501 17
³ Winter street, between Washington and Tremont streets, city proper.	Boston Transit Commission...	Aug. 7, 1913.	Completed Oct. 27, 1913....	5,000 00	5,943 37
¹ C and Mitchell streets, South Boston; Arlington street, Commonwealth avenue and Cygnet street, Brighton; Friend street and Harrison avenue, city proper.	Charles M. Callahan.....	Aug. 29, 1913.	Completed Nov. 10, 1913....	2,662 50	2,752 47
¹ Northern and Old Colony avenues, South Boston; Butler avenue and Orleans street, East Boston; Dix place, Munson and Stuart streets, city proper.	Hugh McNulty.....	Oct. 9, 1913.	Completed Dec. 9, 1913....	3,226 00	2,599 40
² Reservoir road, Brighton.....	M. DeSisto & Co.....	Oct. 16, 1913.	Completed Oct. 31, 1913....	253 50	273 83
³ Summer street, between Washington and Arch streets, city proper.	Boston Transit Commission...	Nov. 1, 1913.	Unfinished.....	3,000 00	Nothing.
^{1, 4} Crest, Dane and Goethe streets, Pierpont and Russell roads, Schortmann's terrace and Stratford street, West Roxbury, and Ray street, Roxbury.	John T. Shea, Jr.....	Nov. 10, 1913.	Unfinished.....	1,778 50	\$1,524 46
^{1, 4} Goodenough street, Price road and Waverly street, Brighton.	Daniel E. Lynch.....	Nov. 19, 1913.	Completed Dec. 23, 1913....	540 00	500 55
^{1, 4} Stimson street, West Roxbury; West Newton street, city proper, and Radcliffe road, Hyde Park.	M. DeSisto & Co.....	Dec. 3, 1913.	Unfinished.....	735 00	709 10
^{1, 4} Allston street, Boulevard terrace, Brighton; Hinsdale road, Trevoire and Wren streets, West Roxbury; Cameron street, Helena road and Tampa street, Dorchester.	M. DeSisto & Co.....	Dec. 27, 1913.	Unfinished.....	2,772 60	1,190 22
^{1, 4} Alabama street, Dorchester; Amory terrace, Roxbury; St. Mary's street, Brookline.	Charles M. Callahan.....	Dec. 29, 1913.	Unfinished.....	710 02	669 13

¹ Advertised and awarded to lowest bidder.² Invitation bid awarded to lowest bidder.⁴ Final payment not made.³ Not advertised, only bid.

Water Pipes.—Relaying.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not including Materials Furnished by City.	Amount Expended in 1913.
¹ Fargo and B streets, South Boston, and Union Park street, city proper.	Thomas Burke.....	April 10, 1913.	Completed May 25, 1913....	\$1,494 50	\$1,407 10
¹ West River street, between Business and Readville streets, and Readville street, between West River and Chesterfield streets, Hyde Park.	Anthony Baruffaldi.....	April 25, 1913.	Completed June 27, 1913....	5,345 00	5,844 59
¹ Linden street, between Brighton avenue and Cambridge street, and Ashford street, between Linden and Malvern streets, Brighton.	Hugh McNulty.....	May 19, 1913.	Completed July 8, 1913....	1,840 00	1,756 39
¹ Newbury street, between Arlington and Berkeley streets, and between Clarendon and Fairfield streets; Marlborough street, between Dartmouth street and Massachusetts avenue, and Fairfield street, between Boylston and Beacon streets, city proper.	John T. Shea, Jr.....	May 20, 1913.	Completed Aug. 4, 1913....	5,138 00	4,569 54
¹ Pleasant street, between Eliot and Washington streets, city proper.	Charles M. Callahan.....	June 19, 1913.	Completed Nov. 3, 1913....	1,737 00	2,221 24
² Quincy shore reservation, Quincy.....	R. Cartullo.....	July 22, 1913.	Completed Aug. 8, 1913....	488 25	518 34
¹ Saratoga street, between Ford and Bennington streets; Bennington street, between Thurston and Antrim streets; Breed street, between Bennington and Ford streets; Emmons street, between Chelsea and Paris streets, and Antrim street, East Boston.	Anthony Baruffaldi.....	July 30, 1913.	Completed Nov. 1, 1913....	2,038 00	2,053 97

¹ River street, Huntington avenue and Mattakeset street, Hyde Park.	R. Cartullo.....	Aug. 6, 1913.	Completed Nov. 3, 1913....	4,349 25	4,150 55
¹ East Lenox street, between Washington and Fellows street; Yeoman street, between Albany and Hampden streets, Roxbury, and Roach street, between Dorchester avenue and Pleasant street, Dorchester.	Timothy Coughlin.....	Aug. 12, 1913.	Completed Oct. 14, 1913....	1,950 00	1,831 88
¹ Norfolk street, between Talbot avenue and Bernard street, Dorchester.	Anthony Baruffaldi.....	Aug. 25, 1913.	Completed Oct. 1, 1913....	2,157 50	2,415 74
^{1, 2} Fox, Draper, Faulkner, Ditson, Leroy, Charles and Hecla streets, Dorchester.	Charles M. Callahan & Co....	Sept. 6, 1913.	Completed Dec. 20, 1913....	3,826 50	2,843 54
^{1, 2} George street, between Hampden and Shirley streets; Eustis street, between Dearborn and Hampden streets, and Norfolk avenue, between Hampden and Magazine streets, Roxbury.	Timothy Coughlin.....	Oct. 17, 1913.	Completed Dec. 20, 1913....	4,026 00	2,740 21
^{1, 2} St. Stephen street, between Bryant street and Opera place; Astor street, between Massachusetts avenue and Hemenway street; Batavia street, between St. Stephen and Hemenway streets; Haviland street, between Massachusetts avenue and Hemenway street, Roxbury; Dalton street, between Belvidere and Cambria streets; Cambria street, between Dalton and St. Cecilia streets, and St. Cecilia street, between Boylston and Cambria streets, city proper.	John T. Shea, Jr.....	Oct. 31, 1913.	Completed Dec. 20, 1913....	3,402 00	2,537 78

¹ Advertised and awarded to lowest bidder.² Not advertised, invitation bid.³ Final payment not made.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
² Covering water pipe, West River street bridge over N. Y., N. H. & H. R. R., Hyde Park.	H. W. Johns-Manville Company,	Feb. 8, 1913.	Completed April 1, 1913.	\$328 00.	\$328 00
² Inspecting special castings at the Warren Foundry and Machine Company.	W. R. Conard.	March 26, 1913.	Unfinished.	\$0.85 per ton.	576 15
² Furnishing labor necessary for assembling 100 Boston post hydrants.	Coffin Valve Company.	April 4, 1913.	Completed June 24, 1913.	\$1,950 00.	1,950 00
² Inspecting gate valves for high pressure fire service.	Will J. Sando.	April 23, 1913.	Unfinished.	\$1,400 00.	700 00
² Cleaning water pipes.	National Water Main Cleaning Company.	April 28, 1913.	Completed July 1, 1913.	\$800 00.	910 10
¹ Excavating and refilling trenches and openings, setting and regulating boxes, establishing hydrants, gates, etc.	Thomas Burke.	May 7, 1913.	Completed Sept. 1, 1913.	\$15,476 00.	5,370 80
² Inspecting flexible joint pipes at R. D. Wood & Co.	W. R. Conard.	May 31, 1913.	Completed Nov. 22, 1913.	\$0.40 per ton.	75 21
³ Supplying water to the Boston Navy Yard.	City of Boston.	June 2, 1913.	Unfinished.	First 20,000 cubic feet, \$0.14 per 100 feet; second 20,000 cubic feet, \$0.13 per 100 feet; third 20,000 cubic feet, \$0.12 per 100 feet, and up to 1,000,000 cubic feet or over, \$0.08 per 100 feet.	8,585 60
¹ Cleaning water pipe, River street, Dorchester, and Brook street, East Boston.	National Water Main Cleaning Company.	June 23, 1913.	Completed Aug. 1, 1913.	\$2,510 00.	2,157 29

PUBLIC WORKS DEPARTMENT.

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³ Supplying water to Forts Strong, Warren and Standish.	City of Boston.....	July 1, 1913.	Unfinished.	First 20,000 cubic feet, \$0.14 per 100 feet; second 20,000 cubic feet, \$0.13 per 100 feet; third 20,000 cubic feet, \$0.12 per 100 feet, and up to 1,000,000 cubic feet or over, \$0.08 per 100 feet.	2,073 60
¹ Furnishing labor necessary for assembling Boston post hydrants and valves.	Coffin Valve Company.....	July 1, 1913.	Completed Nov. 24, 1913.	\$3,105 00.....	3,105 00
⁴ Erecting trolley system in the high pressure fire yard.	The Fairbanks Company.....	Aug. 1, 1913.	Completed Sept. 23, 1913.	\$318 00.....	318 00
² Furnishing plans and specifications for proposed pumping station, Charles street, city proper.	C. H. Blackall.....	Aug. 7, 1913.	.....	\$100 00.....	100 00
⁴ Building portable shanty for east-iron inspectors.....	Coveney Building Company.....	Aug. 15, 1913.	Completed Oct. 6, 1913.	\$125 00.....	125 00
³ Supplying water to the U. S. S. "Chicago," at Gas House Wharf.	City of Boston.....	Aug. 28, 1913.	Completed Oct. 1, 1913.	First 20,000 cubic feet, \$0.14 per 100 feet; second 20,000 cubic feet, \$0.13 per 100 feet; third 20,000 cubic feet, \$0.12 per 100 feet, and up to 1,000,000 cubic feet or over, \$0.08 per 100 feet.	26 60
¹ Excavating and refilling trenches and openings, setting and regulating boxes, establishing hydrants, gates, etc.	Thomas Burke.....	Sept. 18, 1913.	Completed Dec. 10, 1913.	\$8,263 75.....	5,153 98
² Making, grinding and testing casting for water service.	Walworth Mfg. Company.....	Sept. 23, 1913.	Completed Dec. 1, 1913.	\$201 66.....	205 02
⁴ Furnishing and installing motor equipment, water service yard, Albany street.	Crocker-Wheeler Company.....	Sept. 29, 1913.	Completed Jan. 5, 1914.	\$494 00.....	538 00
Lease of wharf, South Bay Terminal....	N. Y., N. H. & H. R. R. Co.....	Oct. 25, 1913.	Completed Jan. 31, 1914.	\$416.67 per month.	

² Only bid, not advertised.⁴ Invitation bids, awarded to lowest bidder.¹ Advertised and awarded to lowest bidder.³ Paid to city.

Miscellaneous.—Concluded.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1912.
² Cleaning and painting offices for high pressure fire service, Bristol street....	The Buildings Care Company...	Oct. 25, 1913.	Completed Nov. 8, 1913.	\$148 00.....	\$148 00
² Agreement to replace 8-inch water pipe by 16-inch pipe under the tracks of the N. Y., N. H. & H. R. R., north of River street.	N. Y., N. H. & H. R. R. Co.....	Nov. 3, 1913.			
¹ Furnishing all labor for assembling 200 Boston post hydrants.	Coffin Valve Company.....	Nov. 6, 1913.	Unfinished.	\$3,500 00.....	Nothing.
² Covering water pipes on bridge over N. Y., N. H. & H. R. R. at Atlantic street, Atlantic.	H. W. Johns-Manville Company,	Nov. 11, 1913.	Completed Dec. 15, 1913.	\$650 00.....	\$650 00
² Inspecting 410 hydrants at East Orange, New Jersey.	W. R. Conard.....	Nov. 29, 1913.	Unfinished.	\$7.00 per day per man.....	322 00
³ Piling water pipe, water service yard, Albany street.	Betts Brothers & Co.....	Jan. 1, 1914.	Completed Jan. 31, 1914.	\$0.50 per net ton.....	Nothing.
¹ Furnishing and erecting electric pumping plant for high pressure fire service, Charles street.	Westinghouse Electric and Manufacturing Company.	Jan. 30, 1914.	Unfinished.	\$179,300 00.....	Nothing.

¹ Advertised and awarded to lowest bidder.² Only bid, not advertised.

The following table shows the snowfall and rainfall since 1907:

Snowfall (inches).

MONTH.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
January.....	16.1	4.3	11.2	11.9	0.7	17.8	0.3
February.....	25.5	9.3	2.3	12.6	19.5	0.2	7.7
March.....	6.6	4.4	3.1	0.2	.....	2.0	0.5
April.....	.....	0.8	.....	.....	.....	0.5	1.4
November.....	.....	.....	.....	1.4	0.3	0.3	.....
December.....	7.0	3.5	12.3	8.1	3.7	9.2	0.9
Totals.....	55.2	22.3	28.9	34.2	24.2	30.0	10.8

Rainfall (inches).

MONTH.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
January.....	2.54	2.47	3.94	4.25	2.28	2.87	2.38
February.....	1.88	2.96	4.71	3.44	2.85	2.38	2.99
March.....	1.66	2.97	3.28	1.25	2.95	4.18	4.81
April.....	3.31	1.70	3.92	2.22	2.28	3.07	4.77
May.....	3.12	3.78	2.33	1.02	0.35	4.04	3.22
June.....	2.56	1.08	4.45	4.89	3.67	0.27	0.64
July.....	1.09	3.17	0.97	1.15	4.65	5.16	2.69
August.....	1.10	4.35	3.55	0.98	4.17	1.94	2.86
September.....	7.43	0.68	5.15	2.14	2.95	1.67	2.51
October.....	2.54	3.70	1.07	1.14	2.27	1.00	6.04
November.....	6.02	0.74	4.11	3.75	4.29	2.61	2.15
December.....	4.31	2.47	3.19	2.10	3.07	5.36	3.05
Totals.....	37.56	30.07	40.67	28.33	35.78	34.55	38.11

In this rainfall is included the precipitation during the winter months, which equals one-tenth of an inch to one inch of snowfall.

Area of Pavements.

The Following Table Shows Areas in Square Yards and Character of Pavements on Accepted Streets February 1, 1914.

District.	Asphalt.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Cobble.	Bitulithic.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1912 report	333,931	2,278,748	114,521	44,230	107,770	2,239	129,382	6,945,748	637,806	130,139	10,724,520
Per cent.	3.11	21.25	1.07	0.41	1.00	0.02	1.21	64.77	5.95	1.21	100.00
February 1, 1914.											
City Proper	249,352	948,708	92,492	11,570	7,733	1,342	86,672	574,518	240	1,461	1,974,088
Charlestown	5,284	265,105	1,418	3,147	756	.....	.....	164,668	275	.....	440,653
East Boston	1,925	135,885	.....	2,109	572	396	620	485,439	18,160	.....	645,106
South Boston	23,441	434,933	2,383	8,067	1,979	.....	17,784	388,750	11,672	50,087	939,096
Roxbury	54,191	303,667	24,479	1,417	49,790	.....	26,267	1,113,290	33,109	2,932	1,609,142
West Roxbury	.....	45,450	583	2,181	.....	.....	10,042	1,359,908	75,036	23,811	1,517,011
Dorchester	.....	154,240	36,613	5,571	48,041	.....	6,570	1,766,491	126,090	18,600	2,162,216
Brighton	130	10,086	256	3,928	.....	.....	7,134	834,346	67,864	5,180	928,924
Hyde Park	.....	1,661	.....	5,191	.....	.....	.....	344,959	238,426	9,567	599,804
Totals	1334,323	2,299,755	158,224	43,181	108,871	1,738	155,089	7,032,369	570,872	111,638	10,816,040
Per cent.	3.09	21.26	1.46	0.40	1.01	0.02	1.43	65.02	5.28	1.03	100.00

Total area of pavements on public streets, 10,816,040 square yards.

NOTE.—In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline is included in city proper.

¹ Of this amount 95 square yards equal asphalt blocks.

² Of this amount 603,803 square yards equal granite block paving on concrete base.

³ Of this amount 1,801 square yards equal Hassam pavement, and 946 square yards equal Blome granitoid concrete blocked pavement, and 937,704 square yards equal bituminous macadam.

24,789 square yards public alleys laid out under chapter 268 of the Acts of 1898 included in this table.

268,398 square yards public streets in charge of Park and Recreation Department included in this table.

In addition to this table there are 5,319 square yards accepted foot passageways.

Public streets laid out and discontinued by the Street Commissioners during the year show pavements increased 5.13 miles or 85,458 square yards.

The building of Stadium Bridge, North Harvard street, shows pavements increased 213 square yards.

Corrections to previous measurements on account of revision and other causes show pavements increased 0.21 mile or 5,849 square yards.

Total net increase, 5.34 miles or 91,520 square yards.

The rate of increase from year to year is shown in the following table:

	Miles.		Miles.		Miles.
1859.....	111.50	1885.....	379.60	1900.....	489.55
1871.....	201.32	1886.....	383.55	1901.....	491.85
1872.....	207.40	1887.....	390.30	1902.....	496.90
1873.....	209.24	1888.....	392.72	1903.....	499.85
1874.....	313.90	1889.....	397.84	1904.....	500.39
1875.....	318.58	1890.....	404.60	1905.....	502.20
1876.....	327.50	1891.....	409.60	1906.....	502.80
1877.....	333.20	1892.....	434.59	1907.....	510.04
1878.....	340.39	1893.....	443.34	1908.....	511.60
1879.....	345.19	1894.....	447.65	1909.....	514.28
1880.....	350.54	1895.....	452.12	1910.....	518.63
1881.....	355.50	1896.....	456.11	1911.....	521.21
1882.....	359.85	1897.....	459.12	1912.....	561.36
1883.....	367.99	1898.....	471.19	1913.....	567.51
1884.....	374.10	1899.....	479.47	1914.....	572.85

Length of Pavements.

The Following Table Shows Length in Miles and Character of Pavement on Accepted Streets February 1, 1914.

District.	Asphalt.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Cobble.	Bitulithic.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1912 report.....	22.15	100.24	4.89	2.15	5.23	0.29	6.77	381.41	41.24	3.14	567.51
Per cent.....	3.90	17.67	0.86	0.38	0.92	0.05	1.19	67.21	7.27	0.55	100.00
February 1, 1914.											
City Proper.....	16.81	41.57	3.80	0.52	0.54	0.15	4.30	27.01	0.04	0.04	94.78
Charlestown.....	0.33	11.74	0.06	0.13	0.04	.....	.....	11.10	0.02	.....	23.42
East Boston.....	0.11	6.35	.....	0.14	0.02	0.06	0.03	22.76	0.86	.....	30.33
South Boston.....	1.98	18.45	0.14	0.37	0.13	.....	1.04	20.69	0.62	1.81	45.23
Roxbury.....	2.90	12.79	1.15	0.05	2.58	.....	1.56	64.67	2.42	0.18	88.30
West Roxbury.....	.....	1.72	.....	0.11	.....	.....	0.51	81.68	5.05	0.29	89.36
Dorchester.....	.....	7.18	1.46	0.25	1.94	.....	0.34	103.00	7.86	0.16	122.19
Brighton.....	.....	0.36	.....	0.24	.....	.....	0.24	38.70	4.62	0.04	44.20
Hyde Park.....	.....	0.08	.....	0.28	.....	.....	.....	18.71	15.73	0.24	35.04
Totals.....	122.13	2100.24	6.61	2.09	5.25	0.21	8.02	388.32	37.22	2.76	572.85
Per cent.....	3.86	17.50	1.15	0.36	0.92	0.04	1.40	67.79	6.50	0.48	100.00

Total length of pavement on public streets, 572.85 miles.

NOTE.—In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline is included in city proper.

¹ Of this amount 0.02 mile equals asphalt blocks.

² Of this amount 22.04 miles equal granite block paving on concrete base.

³ Of this amount 0.12 mile equals macadam.

4.82 miles public alleys laid out under chapter 298 of the Acts of 1898 included in this table.

6.64 miles public streets in charge of Park and Recreation Department included in this table.

In addition to this table there are 1.04 miles accepted foot passageways.

Blome granitoid concrete blocked pavement, and 42.55 miles equal bituminous

The following changes in pavement were made during the year:

0.00 mile or 49 square yards asphalt changed to granite block.
 0.06 mile or 1,286 square yards asphalt changed to wood block.
 0.02 mile or 188 square yards asphalt changed to bitulithic.
 0.00 mile or 55 square yards granite block changed to asphalt.
 0.40 mile or 6,403 square yards granite block changed to wood block.
 0.41 mile or 3,353 square yards granite block changed to bitulithic.
 0.00 mile or 95 square yards granite block changed to macadam.
 0.02 mile or 471 square yards plank on bridges changed to wood block.
 0.02 mile or 290 square yards plank on bridges changed to macadam.
 0.00 mile or 52 square yards brick changed to wood block.
 0.08 mile or 501 square yards cobble changed to granite block.
 0.06 mile or 340 square yards macadam changed to asphalt.
 0.33 mile or 11,487 square yards macadam changed to granite block.
 1.24 miles or 32,653 square yards macadam changed to wood block.
 0.02 mile or 343 square yards macadam changed to brick.
 0.81 mile or 20,058 square yards macadam changed to bitulithic.
 0.05 mile or 2,074 square yards gravel changed to granite block.
 0.00 mile or 9 square yards gravel changed to wood block.
 0.00 mile or 4 square yards gravel changed to bitulithic.
 8.17 miles or 130,415 square yards gravel changed to macadam.
 0.00 mile or 1,467 square yards not graded changed to asphalt.
 0.30 mile or 15,494 square yards not graded changed to granite block.
 0.00 mile or 725 square yards not graded changed to brick.
 0.00 mile or 2,119 square yards not graded changed to bitulithic.
 0.17 mile or 2,856 square yards not graded changed to macadam.
 0.02 mile or 275 square yards not graded changed to gravel.

Streets laid out or discontinued by the Street Commissioners during the year show:

Asphalt decreased 0.01 mile or 45 square yards.
 Granite block decreased 0.06 mile or 1,045 square yards.
 Wood block increased 0.00 mile or 2,881 square yards.
 Brick increased 0.00 mile or 119 square yards.
 Macadam increased 0.70 mile or 10,212 square yards.
 Gravel increased 4.43 miles or 68,463 square yards.
 Not graded increased 0.07 mile or 4,873 square yards.

The building of Stadium Bridge shows North Harvard street at Stadium Bridge:

Macadam increased 0.00 mile or 213 square yards.

Corrections on account of revision and other causes show:

Asphalt increased 0.01 mile or 98 square yards.
 Granite block increased 0.11 mile or 2,333 square yards.
 Wood block decreased 0.00 mile or 52 square yards.
 Plank on bridges decreased 0.02 mile or 288 square yards.
 Brick decreased 0.00 mile or 40 square yards.
 Bitulithic increased 0.01 mile or decreased 15 square yards.
 Macadam increased 0.31 mile or 7,421 square yards.
 Gravel decreased 0.25 mile or 3,170 square yards.
 Not graded increased 0.04 mile or decreased 438 square yards.

LIST OF PERSONAL PROPERTY OF THE PUBLIC WORKS DEPARTMENT ON HAND FEBRUARY 1, 1914, AND ESTIMATED VALUE OF SAME, ALLOWING FOR DEPRECIATION.

Central Office.

1 automobile	\$450 00
Robes	22 00
Supplies for automobile	45 00
	<u>\$517 00</u>

Bridge Service.

6 horses	\$1,950 00
6 wagons	360 00
7 buggies	210 00
9 harnesses	108 00
16 blankets	12 00
3 robes	15 00
2 automobiles	2,300 00
1 auto truck	2,000 00
Supplies, tools and machinery	8,600 00
	<u>\$15,555 00</u>

Ferry Service.

7 ferryboats	\$220,000 00
Tools, machinery and supplies	30,000 00
	<u>\$250,000 00</u>

Lighting Service.

9,997 mantle gas lamps	} posts	\$120,000 00
17 triplicate gas lamps		
95 double gas lamps		
159 fire gas lamps		
4,718 arc lamps		
3,507 tungsten lamps		
2 horses		650 00
2 buggies		60 00
1 auto and supplies		800 00
2 robes		20 00
1 sleigh		10 00
2 harnesses		40 00
		<u>\$121,580 00</u>

Paving Service.

2 autos	\$1,000 00
260 blankets	260 00
28 buggies	870 00
11 pungs	220 00
7 sleighs	140 00
10 jiggers	500 00
31 wagons	1,860 00
10 caravans	1,000 00
3 horse sweepers	240 00
3 road scrapers	1,200 00
3 road machines	1,800 00
14 street watering carts	2,500 00
96 dump carts	10,000 00
116 horses	37,700 00
19 snow levels	3,800 00
21 section rollers	2,100 00
12 steam rollers	21,200 00
35 desks	300 00
2,301 picks	1,150 00
1,989 shovels	1,193 40
Supplies, tools, machinery, surveying instruments, engineers' supplies, etc.	50,000 00
	\$139,033 40

Sanitary Service.

2 automobiles	\$1,800 00
2 auto trucks	6,000 00
299 horse blankets	299 00
28 buggies	1,600 00
197 carts	14,000 00
251 harnesses	5,600 00
315 shovels	156 00
206 horses	66,950 00
91 wagons	4,500 00
23 desks	460 00
5 sleighs	50 00
109 pungs	1,000 00
Miscellaneous tools, washing supplies, instru- ments, etc.	40,000 00
3 scows	30,000 00
	\$172,415 00

Street Cleaning and Oiling Service.

3 autos	\$2,100 00
139 carts	9,730 00
23 buggies	920 00
27 street watering carts	2,700 00
11 wagons	900 00
210 harnesses	2,500 00
178 horses	57,850 00
42 street sweeping machines	8,400 00
10 flushing machines	4,000 00
112 push carts	224 00
713 street sweeping brooms	500 00
714 shovels	500 00
657 picks	459 90
Miscellaneous supplies, etc.	12,000 00
	\$102,783 90

Sewer Service.

4 automobiles	\$2,500 00
46 horses	14,950 00
31 wagons	1,550 00
22 buggies	660 00
27 carts	2,700 00
2 caravans	250 00
71 harnesses	2,130 00
90 blankets	120 00
11 sleighs	220 00
614 shovels	428 40
507 pails	304 20
Derricks, pumps, dynamo, boilers, engineers' tools, machinery, instruments and supplies	480,000 00
	\$505,812 60

Water Service.

5 automobiles	\$6,000 00
57 horses	18,525 00
40 wagons	2,200 00
14 buggies	280 00
10 sleighs	100 00
12 pungs	120 00
Shovels, picks and miscellaneous stock consisting of all kinds and sizes of iron, bad water pipe, meters, hydraulic machinery, boiler, hay and grain	310,000 00
	\$337,225 00

Property in Charge of the Bridge and Ferry Division.— (Bridge Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH YARD AND STABLE.				
170 Broadway extension, South Boston, 5,516 feet of land on Broadway extension and Dorchester avenue, on which is a brick building containing an office, workshop and stable; 948 square feet of this land was taken in 1912 for a convenience station.	\$1 75	\$9,600 00	\$15,000 00	\$24,600 00
LOCATION.				
Estimated Value of Buildings.				
Total Value.				
ATLANTIC AVENUE BRIDGE.				
Draw house, motor house and tool house.....	Draw house, \$1,400; motor house, \$500; tool house, \$100.			\$2,000 00
BROADWAY BRIDGE.				
Draw house and one store house.....	Draw house, \$800; store house, \$200.....			1,000 00
CHARLESTOWN BRIDGE.				
Draw house, electrical power room and six store houses *.....	Draw house, \$3,000; power room, \$1,000.....			4,000 00
CHELSEA NORTH BRIDGE.				
Draw house.....	\$300.....			300 00

* Five leased to M. P. Coleman for \$1,265 per year.

Property in Charge of the Bridge and Ferry Division.—(Bridge Service.)—*Concluded.*

LOCATION.	Estimated Value of Buildings.	Total Value.
CHELSEA SOUTH BRIDGE.		
Draw house and engine house.....	\$1,500.....	\$1,500 00
CONGRESS STREET BRIDGE.		
Draw house, store house and two shelter houses.....	Draw house, \$1,000; store house, \$100; shelter house, \$500.	1,600 00
COTTAGE STREET FOOTBRIDGE.		
Watchman's house.....	\$150.....	150 00
DOVER STREET BRIDGE.		
Draw house and two shelter houses.....	Draw house, \$1,000; shelter houses, \$500.....	1,500 00
DORCHESTER AVENUE BRIDGE.		
Draw house, tool shed, two motor houses and one controller house.....	Draw house, \$1,000; motor houses, \$300; tool house, \$100; controller house, \$25.	1,425 00
GRANITE AVENUE BRIDGE.		
Tool house.....	\$100.....	100 00
L STREET BRIDGE.		
Draw house and engine house.....	Draw house, \$1,000; engine house, \$500.....	1,500 00
MALDEN BRIDGE.		
Draw house.....	\$2,000.....	2,000 00

MERIDIAN STREET BRIDGE.		
Draw house.....	\$2,500.....	2,500 00
NEPONSET BRIDGE.		
Tool house.....	\$150.....	150 00
NORTHERN AVENUE BRIDGE.		
Draw house, containing a power room and storage room for compressed air.....	\$4,500.....	4,500 00
SUMMER STREET BRIDGE.		
Draw house controller house and two shelter houses.....	Draw house, \$3,000; controller house, \$250; shelter houses, \$500.	3,750 00
WARREN BRIDGE.		
Stable, draw house, containing an engine room and boiler room and a tool house.....	\$3,500.....	3,500 00
WESTERN AVENUE BRIDGE TO WATERTOWN.		
Tool house.....	\$200.....	200 00
CHELSEA STREET BRIDGE.		
Draw house.....	\$1,800.....	1,800 00

Property in Charge of Bridge and Ferry Division.— (Ferry Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value
	Per Foot.	Total.		
South Ferry, East Boston side located at the termination of Lewis street. On these premises are one headhouse with canopies, one workshop for carpenters, machinists and blacksmiths, one storehouse, one coal pocket, three piers which form the two slips, two drops and tanks, one wharf and dock.	* 33,196 at \$1 75 † 4,700 at 2 00 * 16,879 at 1 50 † 2,000 at 1 75	\$96,300 00	\$43,000 00	\$139,300 00
South Ferry, Boston side located at the termination of Eastern avenue. On these premises are one headhouse with canopies, one gate room, three piers which form the two slips and two drops and tanks.	2 00	51,100 00	75,000 00	126,100 00
North Ferry, East Boston side located at the termination of Border street. On these premises are one headhouse with canopies, one boiler, one coal pocket, three piers which form the two slips and two drops and tanks.	† 18,876 at 2 00 * 42,262 at 1 75	111,800 00	58,000 00	169,800 00
North Ferry, Boston side located at the termination of Battery street. On these premises are one headhouse with canopies, one gate room, three piers which form the two slips and two drops and tanks.	† 1,051 at 3 50 * 34,600 at 2 00	106,000 00	69,000 00	175,000 00
Eastern Avenue, No. 60, adjoining South Ferry Headhouse, Boston side. Upon this lot is a house and office building owned by Patrick J. Connolly.				

* Wharfs and docks.

† Solid.

Property in Charge of the Highway Division.— (Lighting Service.)

LOCATION.	Estimated Value of Land.	Estimated Value of Buildings.	Total Value.
Lot of land containing 8,000 square feet with brick building thereon, built in 1874, at 690 Albany street. This property is let to the Kising Sun Street Lighting Company at the rate of \$1,200 per year.	\$10,000 00	\$3,000 00	\$13,000 00

Property in Charge of the Highway Division.— (Paving Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON.				
Columbia road, corner of H street, stable, carriage house, shed, tool house and office built by the city on land containing 12,017 square feet, rented from William H. Hart.	\$0 40	\$4,800 00	\$900 00	\$5,700 00
Columbia road, corner Hamlin street, lot of land used for storage purposes, containing 6,710 square feet, rented from Charles P. Mooney, agent.	25	1,700 00	.....	1,700 00
EAST BOSTON.				
¹ East Eagle street, corner Glendon street, sheds, stable and office building erected by the city on wharf property, containing 326,700 square feet, leased in 1910 from Renton Whidden for a term of one year. This property is used jointly with the Sewer, Sanitary, Street Cleaning and Watering Services. *	.....	129,700 00	13,300 00	143,000 00
CHARLESTOWN.				
Medford street, foot of Elm street, wharf property containing 44,700 square feet (Sur. Prog. 968), owned by the city. Upon this lot are a shed, stable and office building.	90	41,100 00	8,500 00	49,600 00
BRIGHTON.				
Union street, opposite Shepard street, lot of land containing 67,280 square feet, owned by the city. This lot is now in custody of Schoolhouse Commission. †	15	10 000 00	.....	10,000 00
Chestnut Hill avenue, ledge lot containing 569,776 square feet (L 1,630), purchased in 1882 by the city. Upon this lot are stone crusher, stable, shed and office building and oil plant.	15	79,800 00	11,000 00	90,800 00

* These estates are only partly occupied by City of Boston.

† These estates are only partly occupied by the Paving Service.

¹ With privilege of extension.

Property in Charge of the Highway Division.—(Paving Service).—*Concluded.*

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
WEST ROXBURY.				
Child street, lot of land containing 43,024 square feet, owned by the city. Upon this lot are sheds, stable and office building. (See Sewer Service.)	\$0 45	\$19,300 00	\$3,500 00	\$22,800 00
Mt. Vernon street, near Pleasant street, lot of land containing 16,275 square feet, belonging to the Schoolhouse Commission. Upon this lot is a stable and office building.	15	2,400 00	3,000 00	5,400 00
Morton street, near Canterbury street, lot of land containing 14,484 square feet, owned by the city and used for storage purposes.	10	1,400 00	.....	1,400 00
DORCHESTER.				
Hancock street, opposite Bowdoin street, lot of land, known as the almshouse lot, containing 104,132 square feet, which belonged to the town of Dorchester at the time of annexation. Upon this land are two stables, office, shed and tool house, used in part by Street Cleaning Service.	18	19,000 00	8,000 00	27,000 00
Downer avenue, lot of land containing 35,300 square feet, was purchased in 1871 to protect the almshouse lot. (Seven lots.)	8c. and 10c.	3,300 00	.....	3,300 00
Codman street, ledge lot containing 299,000 square feet, was purchased in 1870. Upon this lot is a shed containing steam engine and stone crusher, also a stable and tool house; 111,423 square feet additional bought in 1907 by the city.	05	20,600 00	3,000 00	23,600 00
ROXBURY.				
Highland street, lot of land containing 195,129 square feet, owned by the city. Upon this lot is a large brick stable erected in 1873-74 and used by the Sanitary Street Cleaning and Paving Services; also a brick building used as a blacksmith shop and a shed for storage purposes.* (See Sanitary Service.)	40	78,100 00	51,000 00	129,100 00
Washington street, corner Dimock street, lot containing 134,671 square feet, owned by the city. Sold in 1913 for \$37,430.59.	25	33,700 00	.....	33,700 00

SOUTH END.					
Albany street, No. 636, opposite Sharon street, wharf lot containing 63,200 square feet, owned by the city. Upon this lot are stables, office, blacksmith and carpenter shops.	1 25	79,000 00	1,800 00	80,800 00	
Wharf lot adjoining the above, containing 39,511 square feet, owned by the city and used for storage purposes and receiving station for Sanitary Service. These wharves are owned by the city.	90	35,800 00	6,200 00	42,000 00	
Massachusetts avenue, near Magazine street, lot of land containing 1,452,628 square feet, rented from New York, New Haven & Hartford Railroad Company and used for storage purposes.†	80	1,162,100 00	24,900 00	1,187,000 00	
NORTH END.					
Commercial street, No. 521, wharf lot containing 23,667 square feet, owned by the city. Upon this lot is a stable, shed and office building.	2 35	55,300 00	15,700 0	71,000 00	
HYDE PARK.					
Hyde Park avenue, lot containing 18,773 square feet, owned by the city. On this lot is an office, stable and shed.*	1 00	18,800 00	22,200 00	41,000 00	
MILTON.					
Brush Hill road, lot of land containing 64,523 square feet, leased May 13, 1843, by the town of Dorchester for a term of 999 years. Lot of land adjoining above, containing 30,000 square feet, owned by the City of Boston. These lots are not now in use.	.....	8,500 00	.....	8,500 00	

* These estates are only partly occupied by the Paving Service.

† This estate is only partly occupied by the City of Boston.

Property in Charge of the Highway Division.—(Sanitary Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON.				
H and Second streets, stable and sheds, containing 8,590 square feet. Leased from E. M. & M. J. Mahoney.	\$30 and \$40 (two lots).....			
EAST BOSTON.				
324 East Eagle street, sheds, stable and office building on wharf property, containing 326,700 square feet. (See Paving Service.)	.....	.....	*	
DORCHESTER.				
South street, near Freeport street, lot of land taken in 1912 for refuse transfer station. Completed January 4, 1913.	37,990 feet valued as part of 78,458 feet at \$0.08	About \$3,000 00	\$71,333 00	\$74,333 00
ROXBURY.				
Massachusetts avenue and Southampton street, weighing shed contain- ing about 2,300 square feet of land leased from the Boston Consoli- dated Gas Company.				
Ward street, northerly side near N. Y., N. H. & H. R. R. containing 12,500 square feet. See letter of Street Commissioner, January 6, 1914.				
Highland street, situated on the old almshouse block, containing 81,082 square feet. Upon this lot are stable, sheds, carriage house and oil plant, etc. A part of this stable and lot is used by the Paving Serv- ice and Street Cleaning and Oiling Service.*	.....	.....	.....	*

SOUTH END.

Albany street, No. 650, containing 90,800 square feet. Upon this lot are stables, buildings, sheds, veterinary hospital, blacksmith, wheelwright, paint and harness makers' shops, also a horseshoeing shop, used in part by the Street Cleaning and Sewer Services.

Albany street, No. 636, refuse transfer station which was completed March 21, 1913.*

North Grove street, stables, sheds, etc., containing 45,152 square feet. On May 11, 1896, a horseshoeing shop was established, used in part by the Street Cleaning and Oiling Service.

NORTH END.

Fort Hill Wharf, containing 20,750 square feet and used as a dumping station for the city's garbage and refuse. On this wharf a refuse transfer station was erected in 1912.

.....	114,000 00	29,000 00	143,000 00
\$0 02½	101,600 00	62,500 00	164,100 00
14,150 feet at \$12; 2,800 feet at \$3; 3,800 feet at \$1.50.	183,900 00	1,000 00	184,900 00

* See Paving Service.

Property in Charge of the Highway Division.— (Street Cleaning and Oiling Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON. Stable at 162 West Second street, leased by the city from R. S. Brine Transportation Company at \$1,000 per year.	\$0 75			
EAST BOSTON. Part of stable on East Eagle street. (See Paving Service.)				
CHARLESTOWN. Part of stable at 263 Rutherford avenue; office building, Rutherford avenue; stable at 245-249 Rutherford avenue, now occupied, under lease, by Timothy F. Callahan.	60	\$17,700 00	\$8,300 00	\$26,000 00
ROXBURY. Oil plant and part of stable on Highland street. (See Sanitary Service.)				
SOUTH END. Part of stable at 650 Albany street. (See Sanitary Service.)				
BACK BAY. Land at 62 Piedmont street, rented by city from Laurence Minot at \$10 per month; booth loaned by Election Commissioners used as an office on above land.	3 00			
Brick building, 47 Winchester street, leased for \$600 per year from Eleanor W. Daggett.....	2 62½			
WEST END. Part of stable on North Grove street. (See Sanitary Service.)				
DORCHESTER. Oil plant in Sewer Service yard on Gibson street. (See Sewer Service.)				
BRIGHTON. Oil plant in Paving Service yard on Chestnut Hill avenue. (See Paving Service.)				

Property in Charge of Sewer and Water Division.—(Sewer Service.)

LOCATION.	Estimated Value of Land.	Estimated Value of Buildings.	Total Value.
EAST BOSTON.			
East Eagle street, yard and buildings leased from Renton Whidden, part of rental paid by this service. (See Paving Service.)			
BRIGHTON.			
Yard, Western avenue. (See Water Service.)			
WEST ROXBURY.			
Child and South streets, yard and buildings occupied in common with Paving Service. (See Paving Service)	\$19,300 00	\$3,500 00	\$22,800 00
DORCHESTER.			
Old Harbor Point, land and buildings, including pumping station, 22½ acres; 45,729 square feet, more or less, on the westerly side of Mt. Vernon street exchanged with the Boston Consolidated Gas Company for 51,000 square feet, more or less, on the easterly side of Mt. Vernon street.	138,000 00	675,000 00	813,000 00
Gibson street, land, buildings and oil plant eased from trustees of Gibson School Fund, buildings erected by Sewer Service, 42,000 square feet; this property is used jointly by Sewer and Water Services.	7,000 00	5,000 00	12,000 00
SOUTH END.			
Albany street, No. 678, yard and buildings, 42,000 square feet.	56,400 00	3,000 00	59,400 00
Massachusetts avenue, near Albany street, land and buildings, 7,385 square feet.	5,200 00	500 00	5,700 00
BACK BAY.			
Gainsborough street, lot of land with buildings leased from the Boston Elevated Railway Company, 28,000 square feet.			
BACK BAY FENS.			
Gate house.		12,000 00	12,000 00
MOON ISLAND AND SQUANTUM.			
Land, buildings and reservoirs. Upland in Squantum, 19.5 acres; upland on Moon Island, 37.65 acres; flats about Moon Island and Squantum, 131 acres.			

Property in Charge of Sewer and Water Division.—(Water Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
EAST BOSTON.				
Eagle Hill Reservoir, with a capacity of 5,600,000 gallons. Area of property, 220,875 square feet.	\$0 30	\$66,300 00	\$400 00	\$66,700 00
Condor street, formerly East Boston pumping station, now used as district headquarters and containing 40,000 square feet filled and 78,000 square feet flats.....	25,000 at \$0.60 93,000 at \$0.15	15,000 00 13,900 00	8,000 00	36,900 00
High service tank, Orient Heights, capacity 122,000 gallons. Area of property, 11,394 square feet.	0 10	1,100 00	5,000 00	6,100 00
CHARLESTOWN.				
Medford street, corner Tufts street, containing 13,050 square feet. Upon this lot are a work-shop and stable.	50	6,500 00	4,000 00	10,500 00
BRIGHTON.				
Western avenue, lot of land containing 135,350 square feet.....	.....	9,200 00	5,500 00	14,700 00
WEST ROXBURY.				
Mount Bellevue, high tank service, with a capacity of 122,000 gallons. Area of property, 2,455,062 square feet.	02	49,100 00	10,000 00	59,100 00
Washington street and Metropolitan avenue, lot of land and pumping station. Area of property, 12,895 square feet.	14	1,800 00	8,000 00	9,800 00
DORCHESTER.				
Gibson Street, land and buildings. See Sewer Service.				
ROXBURY.				
Heath and Lawn streets, strip of land containing 5,707 square feet.....	25	1,425 00		

SOUTH END.					
Albany street, No. 710, containing 98,100 square feet. Upon this lot are a machine shop, stable, wharf and pipe yard.	.....	91,000 00	117 000 00	208,000 00	
HYDE PARK.					
Fairmount Reservoir, with a capacity of 1,500,000 gallons.*.....	} 04	8,200 00	15,000 00	23,200 00	
Fairmount standpipe, with a capacity of 500,000 gallons. Area of property, 6.35 acres.....					
Water street, pumping station and lot of land. Area of property, 934,951 square feet.....	05	46,700 00	5,000 00	51,700 00	
Sprague street, bordering Sprague Pond, lot of land containing 16,128 square feet.....	.....	500 00	.....	500 00	
BROOKLINE.					
Fisher Hill Reservoir, with a capacity of 15,400,000 gallons. Area of property, 459,670 square feet.†	57	26,000 00			
Pipe route, from Beacon street to Boylston street. Area of property, 163,000 square feet....	15	2,500 00			
WINTHROP.					
Strip of land at Point Shirley containing 7,725 square feet.....	01	77 25			
DEDHAM.					
Paradise lane, containing 12.5 acres. Upon this lot is a pumping station.....	.....	7,000 00	2,000 00	9,000 00	

* 206,020 square feet in Boston, balance in Milton.

† Sold to Metropolitan Sewerage and Water Board, June 10, 1913, for \$150,000.

EMPLOYEES.

The following tables show the number of requisitions made on the Civil Service Commission for men; the number appointed, reinstated, died, resigned, discharged and retired; also the grade and number of employees in the department:

Requisitions made on the Civil Service Commission	64
Requisitions canceled	5
Certifications returned, no selection made	4
Number of men called	120
Number of men certified	215
Number of men appointed	113
Provisional appointments made permanent	22
Applications made for promotions	20
Promotions allowed	12
Promotions allowed provisionally	8
Requests for permission to reinstate	25
Reinstatements allowed	* 20
Reinstatements not allowed	5
Number of men resigned	14
Number of men discharged	38
Number of men died	87
Number of Civil War veterans retired	17
Number of laborers retired	50
Number of transfers to other departments	14
Number of transfers from other departments	45

The records of the department show that there are now 3,370 persons eligible for employment in the several divisions and of that number 3,223 were upon the January, 1914, pay rolls.

* Fourteen of these men were on the eligible list February 1, 1913.

Grade and Number of Employees.

	DIVISIONS.									
TITLE.	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lamp.	Water.	Total.
Commissioner.....	1	...	...	...	...	...	...	...	...	...
Division engineers.....	...	1	...	...	...	...	1	...	1	3
Chief clerk.....	1	...	...	...	...	...	...	...	...	1
Clerks.....	42	17	8	3	1	...	1	2	33	107
Messengers.....	2	3	1	...	1	...	...	...	2	9
Chief engineers (civil).....	...	1	1	...	...	...	...	...	...	2
Assistant engineers (civil).....	...	11	29	...	...	...	16	...	8	64
Draughtsmen.....	...	1	16	...	...	...	3	...	3	23
Instrumentmen.....	...	3	16	...	...	...	2	...	4	25
Rodmen.....	...	9	33	...	...	...	5	...	7	54
Axeman.....	...	1	...	...	...	...	...	...	...	1
Inspectors.....	...	43	48	42	40	...	3	5	43	224
Foremen.....	...	10	7	7	9	...	...	...	14	47
Subforemen.....	...	37	6	...	8	...	2	...	...	53
Addressograph printer.....	...	...	...	...	...	...	...	...	1	1
Blacksmiths and assistants.....	...	9	2	17	...	...	...	...	2	30
Boilermaker.....	...	...	...	...	...	1	...	...	...	1
Bracers and assistants.....	...	...	70	...	...	...	...	...	...	70
Blueprinters.....	...	...	1	...	...	...	1	...	...	2
Boys.....	1	3	1	...	...	1	1	...	1	8
Chauffeurs.....	1	2	5	3	3	...	3	1	5	23
Carpenters and assistants.....	...	17	8	5	...	3	12	...	9	54
Caretakers.....	...	...	...	...	...	...	2	...	...	2
Chief inspectors.....	...	1	1	...	1	...	...	...	2	5
Claim agent.....	1	...	...	...	...	...	...	...	...	1
Cement testers and assistants.....	...	...	2	...	...	...	...	...	...	2
Coal passers.....	...	...	7	...	...	...	...	...	...	7
Cashier.....	...	...	...	...	...	1	...	...	...	1
Drawtenders and assistants.....	...	...	...	...	...	...	148	...	...	148
Deckhands.....	...	...	...	...	...	31	...	...	...	31
Derrickmen.....	...	...	...	...	...	...	...	...	2	2
Driver.....	...	1	...	...	...	...	...	...	...	1
Carried forward.....	49	170	262	77	63	37	200	8	137	1,003

Grade and Number of Employees.—*Continued.*

TITLE.	DIVISIONS.									
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lamp.	Water.	Total.
<i>Brought forward</i>	49	170	262	77	63	37	200	8	137	1,003
Dumpers.....				1	3					4
Elevatorman.....									1	1
Engineers (steam).....		12	15			12			1	40
Electricians.....		1	1			1	1			4
Firemen.....		1	7		3	42			2	55
Gatemen.....			6			16			4	26
General foremen.....				1	2	1			2	6
Harnessmakers and assistants.....				9						9
Horseshoers.....				7						7
Inspectors, castings.....									2	2
Janitors (scrub).....		1		1		6	1		2	11
Janitresses.....						6				6
Joiners.....						3				3
Laboreys and helpers.....		304	150	187	276	6			163	1,086
Lamplighters.....						2		2		4
Machinists and assistants.....			4				1		19	24
Meter testers.....									4	4
Meter readers.....									19	19
Masons (stone and brick).....			15							15
Medical inspectors.....		1		1						2
Oilers.....			15			12				27
Patternmaker.....									1	1
Pavers and assistants.....		73							1	74
Plumbers and assistants.....				1					48	49
Painters.....		1	1	11		2	3			18
Pilots.....						12				12
Property inspector.....	1									1
Quartermasters.....						12				12
Repairers.....									45	45
Roofers.....						1			1	2
Rammers.....		36								36
Rigger.....						1				1
<i>Carried forward</i>	50	600	476	296	347	172	206	10	452	2,609

Grade and Number of Employees.— *Concluded.*

TITLE.	DIVISIONS.									
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lamp.	Water.	Total.
<i>Brought forward</i>	50	600	476	296	347	172	206	10	452	2,609
Sealers.....									2	2
Sewer flushers.....			3							3
Supervisors.....		1		1			2	1		5
Steamfitters.....			1			1				2
Stenographers.....	2	2	1			1	1			7
Stonecutters.....		16	2						1	19
Superintendents.....			1						1	2
Storekeeper.....						1				1
Stockkeepers.....				1					3	4
Stablemen.....		27	8	36	27		5		13	116
Tallymen.....				2						2
Tankman.....						1				1
Teamsters.....		77	16	181	130				27	431
Telephone operators.....	2								1	3
Tollmen.....						12				12
Toolmen.....		4								4
Chief veterinarian.....		1								1
Watchmen.....		30	21	16	5		5	1	12	90
Weighers and assistants.....		3		3						6
Wharfingers and assistants.....		1		4						5
Wheelwrights and assistants.....				5						5
Yardmen.....		9	5	13	6				7	40
Totals.....	54	771	534	558	515	188	219	12	519	3,370

**Comparative Table Showing the Number of Employees Actually
Employed February 1, 1913, and February 1, 1914.**

	Central Office.	Bridge.	Ferry.	Lamp.	Paving.	Sanitary.	Sewer.	Street Cleaning and Watering.	Water.	Total.
February 1, 1913.	56	212	179	11	739	571	528	474	509	3,279
February 1, 1914.	54	214	182	12	733	546	506	484	492	3,223

Total Eligible Force.

February 1, 1913.	56	217	186	11	773	596	553	496	538	3,426
February 1, 1914.	54	219	188	12	771	558	534	515	519	3,370

Table of Employees Showing Appointments, Transfers, Resignations, Retirements, Deaths, etc., During the Year.

Died.	Retired Laborers.	Retired Veterans.	Transferred to Other Departments.	Transferred to Other Services.	Resigned.	Discharged.	February 1, 1913.	SERVICES, 1913-14.	January 31, 1914.	Transferred from Other Services.	Transferred from Other Departments.	Reinstated.	Appointed.
...	...	1	1	1	1	...	56	Central Office.....	* 54	1	...	...	1
6	...	3	...	4	3	2	217	Bridge.....	219	5	...	...	15
6	3	2	1	5	2	2	186	Ferry.....	188	15	...	...	8
...	...	...	...	...	...	...	11	Lighting.....	12	1	...	...	...
17	16	2	2	24	1	7	773	Paving.....	771	53	6	1	7
14	9	2	3	45	3	8	596	Sanitary.....	558	31	4	3	8
11	7	1	3	59	...	8	496	Street Cleaning.....	515	38	35	1	34
15	5	3	2	19	1	4	553	Sewer.....	534	14	...	1	15
18	10	3	2	9	3	7	538	Water.....	519	8	...	...	25
87	50	17	14	166	14	38	3,426	Totals..	3,370	166	45	6	113

* Includes eight Central Office employees who are paid on Water Service pay roll.

REPORT OF EXAMINING PHYSICIANS.

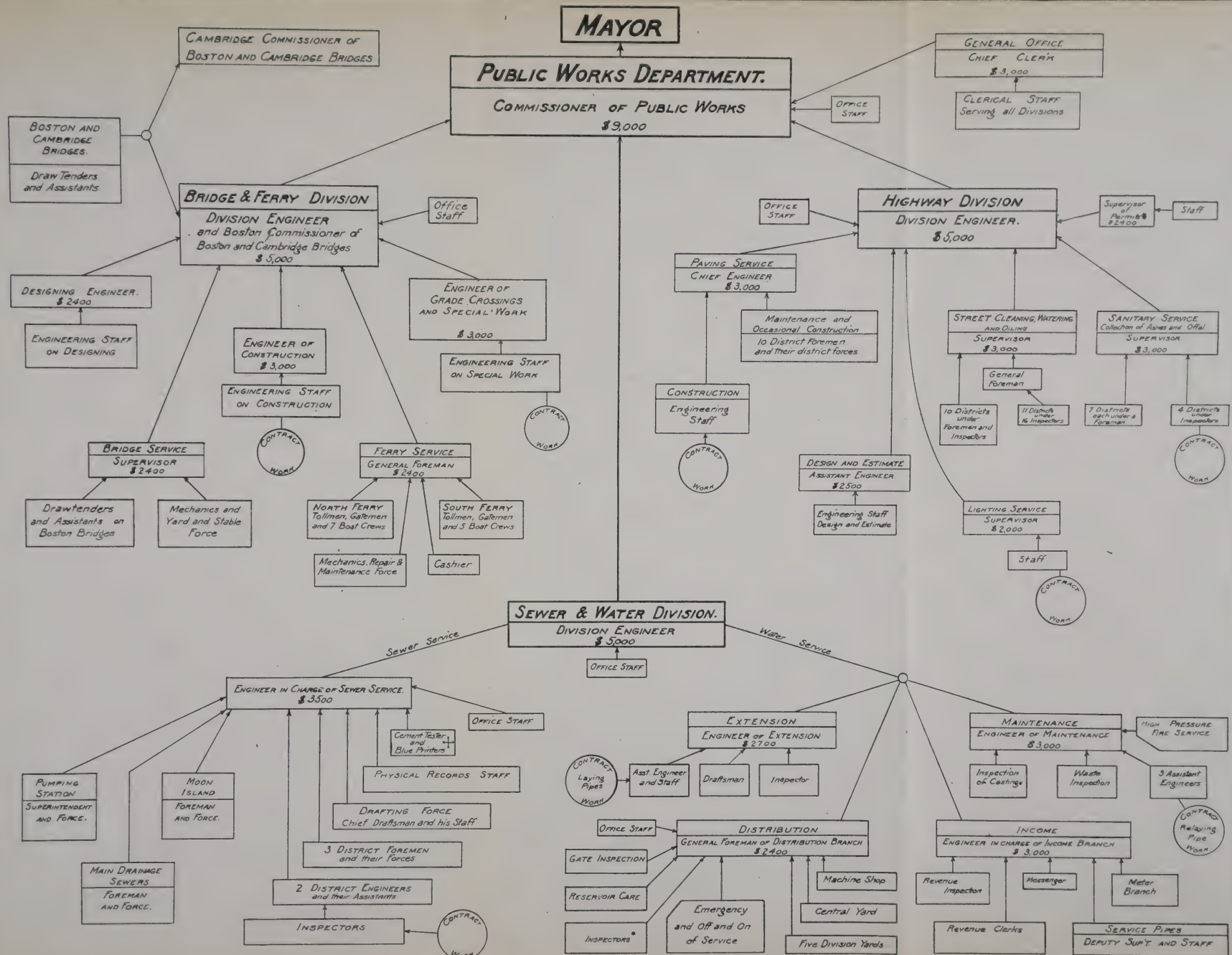
Number of accidents to employees reported	398
Number of employees examined for retirement	10
Number of employees treated	573

REPORT OF CHIEF VETERINARIAN.

Horses died	17
Horses condemned and killed	21
Horses sold at public auction	20
	—
Horses bought	58
	57

Respectfully submitted,

L. K. ROURKE,
Commissioner of Public Works.



† These men do cement testing and blue printing for all divisions

* These men inspect also the contract work under "Extension" and "Maintenance."

PART II.

APPENDICES.

APPENDIX A.

Appropriation	\$80,000 00	
Transferred from Highway Division	159 50	
		<u>\$80,159 50</u>
Salary, commissioner	\$9,000 00	
Salaries, clerks, stenographers	60,836 94	
Automobile expense:		
Wages of chauffeur	\$1,113 00	
Electric light at garage	10 75	
Gasolene *	385 87	
Oil soap and grease	37 10	
Tubes, cases, repairs		
and supplies, ...	540 44	
Registration	15 50	
		2,102 66
Books, papers and office expense	437 77	
Stationery	742 41	
Telephones, rentals and calls	2,981 22	
Printing	3,173 76	
Postage	384 11	
Travel expense	200 63	
Expert services, real estate	300 00	
		<u>\$80,159 50</u>

* \$76.93 furnished other Service (452 gallons).

APPENDIX B.

REPORT OF THE DIVISION ENGINEER OF THE
BRIDGE AND FERRY DIVISION.

BOSTON, February 2, 1914.

MR. L. K. ROURKE,

Commissioner of Public Works:

DEAR SIR,—I respectfully submit the following report of the income, expenditures and operation of the Bridge and Ferry Division for the year 1913.

The expenditures of the division in the regular maintenance appropriations of the department were \$566,894.91, as against an appropriation and revenue of \$598,189.63, leaving a surplus for the year of \$31,294.72.

In addition to the regular maintenance work the division supervised the expenditure of \$290,370.51 under a number of special appropriations, mainly for the construction of bridges, making the total expenditures for the year under appropriations credited to the Bridge and Ferry Division \$857,265.42. This figure does not include the cost of widening and rebuilding Pleasant Street Bridge, which was paid for out of a special appropriation under the Highway Division, nor the expenditures on grade crossings and on work of other departments supervised by the division engineering staff.

BRIDGE SERVICE.

There are in Boston 186 highway bridges, of which 117 are maintained wholly or in part from the appropriation for the Bridge and Ferry Division, 45 are maintained wholly by the railroad corporations, 22 by the Park and Recreation Department and 2 by the Metropolitan Park Commission.

In addition to the usual work of maintenance on the bridges in its care this division has supervised during the year a considerable amount of new construction work on bridges, etc., principally as follows:

*Chelsea Bridge (over North Channel of Mystic River).—*The work of rebuilding this bridge, begun under contracts made in 1912, was substantially completed during the year. In the old bridge there was a single waterway, 60 feet in width, situated in an unsatisfactory location near the Chelsea shore. Acting under an order of the War Department the city has now provided through the bridge two waterways, each 125 feet in width, dredged to a depth of 30 feet at low water, thus opening up the Mystic River Basin to navigation by the largest vessels that can ever enter that estuary. This work necessitated the building upon a permanent masonry pier of a new steel draw span 363 feet long and 60 feet wide, weighing over 1,400 tons, this being the largest draw span in this part of the country. The remainder of the bridge, a pile structure, was rebuilt only so far as was necessary to conform to the new draw span. The reconstructed bridge was opened to travel May 28, 1913. (For a detailed description of this work see page 108).

*Chelsea Bridge (over South Channel of Mystic River).—*For a number of years the old draw span of this bridge, built in 1877, has been inadequate for highway travel, necessitating rigid traffic restrictions, which result in frequent blockades to the highway travel in rush hours. A permanent new bridge is needed extending from the Charlestown shore at the Navy Yard to Mystic Wharf. As a preliminary step to the building of a permanent new structure an appropriation of \$75,000 was made for the construction of a temporary bridge alongside the existing bridge. A contract for the temporary bridge was made August 15, 1913. Work was begun September 8, 1913, and is still in progress. (See page 92.)

Apportionment of Cost of Bridges Between Boston and Chelsea.—Under an act of the Legislature (chapter 581 of the Acts of 1911, supplemented by chapter 341 of the Acts of 1913) the cost of the reconstruction of Chelsea Bridge, noted above, and of Meridian Street Bridge, rebuilt in 1912, which has been wholly borne by the City of Boston, is to be apportioned in part by a special commission upon the city of Chelsea, other cities and towns specially benefited, and the street railway companies using the bridges. An important part of the work of the engineering staff of this division has been the preparation and presentation, under the direction of the Corporation Counsel, of evidence in the city's case on this apportionment, on which hearings were begun in April, 1913, and were not concluded until January, 1914.

Broadway Bridge (over Fort Point Channel). The greater part of this bridge was rebuilt in 1901-04, but at that time the old draw span, built in 1874-75, was continued in service, and had reached a condition such that its rebuilding is now necessary. On November 20, 1913, a contract was made for rebuilding the draw span and the masonry pier upon which it rests, and work on the new steel structure is now in progress at the mills and shops. It is expected that the new draw span will be completed during the summer of 1914.

Winthrop Bridge.—The reconstruction of Winthrop Bridge, which for some time has been an urgent necessity, was authorized by the Legislature under chapter 412 of the Acts of 1913, which provides that the City of Boston shall do the work, and that the cost of rebuilding the bridge shall be apportioned between Boston and Winthrop. Plans have been prepared and approved by the Directors of the Port of Boston, but the approval of the Secretary of War is still pending. A contract for the rebuilding of this bridge will be let as soon as the Federal license is obtained.

L Street Bridge.—The work of repairing L Street Bridge, begun in 1912, was completed September 3, 1913. This involved the complete rebuilding of the floor of the pile bridge and the strengthening of same to provide for street car traffic, the cost of strengthening being borne by the Boston Elevated Railway Company. An electric motor was substituted for steam power for the operation of the draw span. (For a detailed description of this work see page 111.)

Pleasant Street Bridge.—Pleasant Street Bridge, over the southerly entrance to the Tremont Street Subway, was widened and rebuilt during the year in connection with the widening of that street. (See page 112.)

Lawndale Terrace Subway.—The construction of a subway for foot travel, under the Providence Division of the New York, New Haven & Hartford Railroad, at Lawndale terrace, Jamaica Plain, begun in 1912, was completed on March 28, 1913.

Public Boat Landings.—During the year two temporary public boat landings, one at Northern Avenue Bridge, the other at Summer Street Bridge, in Fort Point channel, were completed and opened to public use.

Abolishment of Grade Crossings.—The work on the abolishment of the grade crossing on Saratoga street, East Boston, by the Boston, Revere Beach & Lynn Railroad, begun under a decree of the Superior Court in 1912, continued through the year until its completion on December 6, 1913. A verification of the accounts of the cost of the work for submission to the auditor appointed by the Court to apportion the expense is now in progress. (See, also, Saratoga Street Bridge, page 112.)

FERRY SERVICE.

A system of checking the collection of tolls from team traffic was put in operation during the year, and by its introduction approved business methods are now in effect in connection with the financial administration of the ferries. During the year the work of repairing ferry landings, under a special appropriation previously made, was completed and an unusually large amount of repair work to the ferryboats was done. Taken as a whole, the condition of the ferry plant shows marked improvement over former years.

The Directors of the Port of Boston have taken the old Eastern Railroad pier property, adjoining the South Ferry landing in East Boston, and they propose to deepen the dock next the ferry property by dredging. As this will undermine the ferry coal pocket and as part of the southerly ferry slip is needed for entrance to the proposed new dock, some rearrangement of the East Boston ferry landings will have to be made before the improvements contemplated by the Directors of the Port can be carried out, and plans for changes in these ferry landings are now under consideration.

RECOMMENDATIONS FOR 1914.

Bridge Service.— During the coming season a considerable amount of repair work on bridges should be done by contract in addition to the ordinary repairs made by the maintenance force of the division. For this purpose an appropriation was requested in the budget estimates of 1914 of \$108,000 for the repair of thirty-three City of Boston bridges and \$19,000 for Boston's share of necessary repairs on bridges under the charge of the Boston and Cambridge Bridge Commission. This money should be provided either as a part of the regular department appropriation or as a special appropriation. Of this total amount of \$127,000, \$57,000 is required for cleaning and painting steel structures. Failure to keep bridges properly painted, particularly in the case of steel bridges over railroads, is a most wasteful policy, as has been proven in the past in the case of Boylston Street Bridge over the Boston & Albany Railroad, which had to be entirely rebuilt in 1907 after eighteen years' service because of the excessive deterioration of the steel members from corrosion.

In addition to the above repair work on bridges, Hyde Park Avenue Bridge over Mother brook (Ward 26) should be entirely rebuilt, and the flooring of Warren Bridge, which has been in service for thirty-one years, should be renewed. Consideration should also be given to the necessity of rebuilding Congress Street Bridge across Fort Point channel, particularly in view of the large increase in teaming traffic between the city proper and the Commonwealth and fish piers on the South Boston waterfront.

The building of a permanent structure in the portion of Chelsea Bridge over the south channel of the Mystic river will shortly have to be provided for. The temporary bridge, now under construction, will replace the existing draw span which is now unsafe for heavy loads, but, because of its narrow width, it will not be adequate to reasonably accommodate the large volume of street car and team traffic using this important thoroughfare.

Ferry Service.— In the Ferry Service the most important matter is the provision for a new ferryboat in place of the old ferryboat "D. D. Kelly," which has been in service since 1879. The United States Government inspectors have cut down the allowable boiler pressure from the original limit of 40 pounds to 25 pounds, which

is the minimum pressure on which the boat can be safely operated. At any time the inspectors are liable to condemn the boat or to order a still further reduction in the allowable boiler pressure, which will be virtually a condemnation so far as service on the East Boston ferries is concerned. An appropriation for a new boat should be made early in 1914, as nearly a year will be required for its construction.

A special appropriation should also be made for rebuilding during the fall and winter of 1914 the south fender pier at the North Ferry, East Boston, and the south fender pier at the South Ferry, East Boston, both of which are in poor condition.

The ferryboat "Hugh O'Brien" will have to be extensively repaired, involving the entire renewal of the roadway deck and such timbers as may be found in a decayed condition. On the ferryboats "Noddle Island" and "Governor Russell" the circulating pumps and surface condensers are in poor condition and should be replaced by new pumps with jet condensers, similar to that just installed on the "General Sumner." All four headhouses should be painted, two drops at the North Ferry should be paved and a new tank should be provided at the North Ferry, East Boston.

Provision for this maintenance repair work on the ferries has been made in the department recommendations for the budget for the ensuing year.

REPORT IN DETAIL.

A detailed report of the operation and expenditures of the Bridge and Ferry Division during the year, including a statement of the financial activities of the division, exclusive of the cost of work supervised for other departments or divisions, is appended herewith.

Respectfully submitted,

FREDERIC H. FAY, *Division Engineer.*

BRIDGE AND FERRY DIVISION.

FINANCIAL STATEMENT.

Receipts.

Appropriation	\$597,000 00
Revenue:	
Bridge Service	\$289 63
Ferry Service	900 00
	1,189 63
	<u>\$598,189 63</u>

Expenditures from Maintenance Appropriation.

Bridge Service:	
City of Boston bridges	\$271,423 04
Bridges in charge of Boston and C a m b r i d g e Bridge Com- mission	17,744 48
Total charged to Bridge Service,	\$289,167 52
Ferry Service	277,727 39
Total expenditures under appro- priation	\$566,894 91
Transferred:	
To Highway Division	30,000 00
Balance unexpended	1,294 72
	<u>\$598,189 63</u>

Total Expenditures.

Bridge Service:	
Expenditures from maintenance appropriation, as above	\$289,167 52
Expenditures charged to special appropriations (new construc- tion, contract repair work, etc.),	282,838 00
Total amount expended on bridges	\$572,005 52
Ferry Service:	
Expenditures from maintenance appropriation, as above	\$277,727 39
Carried forward	\$277,727 39
	\$572,005 52

<i>Brought forward</i>	\$277,727 39	\$572,005 52
Expenditures charged to special appropriation for Ferry Landings, Repairs	7,532 51	
Total amount expended on ferries		285,259 90
Total expenditures by Bridge and Ferry Division, exclusive of expenditures for grade crossings and of work supervised by the division engineering staff but paid for out of appropriations of other departments or divisions		\$857,265 42

BRIDGE SERVICE.

At the close of the fiscal year 1913-14 there are in the City of Boston 186 highway bridges, not including culverts. Six of these bridges, namely, Brookline Street, Cambridge, Cambridge Street, Harvard, Prison Point and Western Avenue to Cambridge, all connecting Boston and Cambridge (the four latter being draw bridges) are in charge of two commissioners, one of whom is appointed by the Mayor of Boston and the other by the Mayor of Cambridge. One-half the cost of the maintenance of these six bridges is paid by the City of Boston out of the appropriation for the Bridge and Ferry Division, and the division engineer of that division is the commissioner for the City of Boston in charge of these bridges. The Anderson Bridge at Soldiers Field, replacing the North Harvard Street Bridge, between Boston and Cambridge, is now being constructed under the direction of the Metropolitan Park Commission, and upon its completion will be maintained by the Boston and Cambridge Bridge Commission. The report of the Commissioner for the Boston and Cambridge bridges will be found in Appendix E. The Charles River dam, on the site of the old Canal or Craigie Bridge, and Mattapan Bridge are in charge of the Metropolitan Park Commission. One hundred and thirty-nine bridges are supported wholly or in part by the City of Boston, twenty-four of these being over navigable waterways and provided with draws. Forty-five highway bridges are supported entirely by railroad corporations.

There are sixteen important drawbridges wholly maintained by the City of Boston, namely, Broadway,

Chelsea South, Congress Street and Warren, operated by steam; Atlantic Avenue, Charlestown, Chelsea North, Chelsea Street, Dorchester Avenue, Dover Street, L Street, Malden, Meridian Street, Neponset and Summer Street, operated by electricity; and Northern Avenue, operated by compressed air, the compressors being run by electricity.

EXPENDITURES ON BOSTON BRIDGES.

(1.) Administration:

Salaries:

Division engineer *	\$2,500 00	
Supervisors	3,949 17	
Engineers and draftsmen,	24,303 64	
Stenographer	1,050 57	
Messenger	318 00	
		\$32,121 38

Pensions paid to veterans of Civil War, retired	4,292 25	
Pay allowed for holidays	610 10	
Pay allowed for injuries to employees	137 50	
Printing, postage and stationery	1,005 90	
Advertising	125 50	
Telephones	306 76	
Traveling expenses	446 28	
Engineers' office supplies, etc.	893 81	
		\$39,939 48

(2.) On Bridges:

Salaries of drawtenders and

caretakers	\$142,067 80	
Extra help on bridges	140 00	
		\$142,207 80

Light	1,110 27	
Fuel	3,176 37	
Electric power	3,698 85	
Sand	41 66	
Water	107 56	
Oil	1,176 01	
Tools, hardware and supplies	2,219 78	
Furnishings	164 64	
Building repairs, etc.	602 72	
Ironwork and machine repairs	9,369 46	
General repairs, fences, piers, foundations, etc. (outside of department force)	1,367 87	

General repairs on machinery, roadways, fences, etc. (by department mechanics):

Labor, carpenters, painters, watchmen, electrician and machinist	\$22,314 24	
--	-------------	--

Labor, removing snow and cleaning bridges	1,200 14	
---	----------	--

	\$23,514 38	
Lumber	21,888 84	
Paint stock	455 37	

Carried forward . . . \$45,858 59 \$165,242 99 \$39,939 48

* One-half salary; remainder paid by Ferry Service.

Brought forward \$45,858 59 \$165,242 99 \$39,939 48

Paid railroad company's
for flagmen

175 71

46,034 30

211,277 29

(3.) Public Landings: Rent, East Boston public landing 366 63

(4.) Yard and stable:

Yard: Employees:

Clerk, janitor and watch-
men

\$2,587 76

Light 118 70

Fuel 194 79

Repairing, building, etc., ... 325 75

Catch-basin 198 29

\$3,425 29

Stable:

Employees: Stablemen

and teamster \$4,345 50

Feed and straw 983 45

Veterinary 61 50

Shoeing and clipping 292 95

Wagons and harness 1,138 27

Stable supplies 58 78

New horses 454 63

7,334 58

10,759 87

(5.) Automobiles:

New: Truck \$3,100 00

Maintenance:

Division engineer:

Wages, chauffeur
(part) . . . \$774 00

Storage 240 00

Repairs and s u p-
plies 1,036 29

Oil 45 10

Gasolene 173 23

Tires and tubes:

New . . \$305 19

Repairs, 42 25

347 44

\$2,616 06

Supervisor:

Wages, chauffeur, \$993 21

Storage 135 00

Repairs, supplies,

oil, etc. 362 37

Gasolene 98 98

Tires and tubes:

New . . \$349 60

Repairs, 47 35

396 95

1,986 51

Truck:

Wages, chauffeur, \$824 00

Repairs and s u p-

plies 106 20

Oil 53 05

Carried forward \$983 25 \$4,602 57 \$3,100 00 \$262,343 27

Brought forward	\$983 25	\$4,602 57	\$3,100 00	\$262,343 27
Gasolene	20 74			
Tires and tubes:				
New	\$295 56			
Repairs, 77 65				
	<u>373 21</u>	<u>1,377 20</u>	<u>5,979 77</u>	<u>9,079 77</u>

Total expenditures on City of Boston bridges \$271,423 04

Summary:

(1) Administration	\$39,939 48
(2) Bridges	211,277 29
(3) Public landings	366 63
(4) Yard and stable	10,759 87
(5) Automobiles	<u>9,079 77</u>

Total *\$271,423 04

EXPENDITURES UNDER SPECIAL APPROPRIATIONS DURING
FISCAL YEAR 1913-14.

ASHLAND STREET BRIDGE.

Labor, Paving Service, building approaches.	\$330 00	
Amount paid Boston Bridge Works under contract for building sidewalks	<u>1,427 00</u>	\$1,757 11

Total expended to January 31, 1914, \$1,801.61.

BROADWAY BRIDGE, REBUILDING.

Engineering	\$3,377 29	
Printing	107 70	
Advertising.	<u>11 70</u>	\$3,496 69

Total expended to January 31, 1914, \$4,150.71.

CHELSEA BRIDGE NORTH.

Engineering	\$4,691 50	
Inspection	1,815 84	
Rent of wharf for temporary bridge	900 00	
Reporting hearings	579 90	
Two Norton jacks	443 34	
Services of diver	33 40	
Photographs and prints	98 13	
Supplies for engineers' field office	16 75	
Travel expenses	190 21	
Shop inspection of material	323 45	
Curbs, scuppers, etc.	<u>127 26</u>	
Installing machinery:		
Lundin Electric Company	\$225 00	
J. H. Long Machinery Company, ...	962 34	
Cutler-Hammer Manufacturing	<u>14 67</u>	
		<u>1,201 95</u>

Carried forward \$10,421 73

* Does not include bridges under charge of Boston and Cambridge Bridge Commission.
(See Appendix E, page 489.)

<i>Brought forward</i>	\$10,421 73	
Water pipe tunnel:		
Lawler Brothers	\$442 00	
Metropolitan Water and Sewer Board	835 63	
		1,277 63
Bay State Dredging Company		1,019 40
Lighting and heating apparatus:		
Herbert S. Potter lighting apparatus	\$1,827 08	
Heating apparatus	514 90	
		2,341 98
Amount paid Boston Bridge Works under contract for building superstructure:		
Contract items	\$121,691 71	
Less amount paid in 1912	13,600 00	
		109,091 71
Amount paid Boston Bridge Works for miscellaneous repairs		973 89
Amount paid George T. Rendle under contract for rebuilding bridge:		
Contract items	\$156,663 36	
Extra work under order April 5, 1912	2,188 00	
Extra work under order April 10, 1912	2,766 79	
Extra work under order July 1, 1912	1,409 89	
Extra work under order September 19, 1912	13,591 32	
		\$176,619 36
Less 15 per cent on \$84,144.11	12,621 62	
		\$163,997 74
Less amount paid in 1912	141,257 82	
		22,739 92
Amount paid W. E. Litchfield for completion of Rendle contract for rebuilding bridge	\$15,069 72	
Less 15 per cent	2,260 46	
		12,809 26
Amount paid W. E. Litchfield, miscellaneous work		386 52
		<u>\$160,368 03</u>
Total expended to January 31, 1914, \$380,294.55.		

CHELSEA BRIDGE SOUTH.

Engineering	\$3,495 84	
Inspection	680 50	
Advertising and printing	78 91	
Travel expenses	25 42	
Miscellaneous supplies, etc.	5 00	
Amount paid Rendle & Stoddard under contract for building temporary bridge	\$34,190 00	
Less 15 per cent	5,128 50	
		29,061 50
		<u>\$33,347 17</u>
Total expended to January 31, 1914, \$33,347.17.		

MERIDIAN STREET BRIDGE.

Inspection	\$377 06	
Reporting hearings	190 20	
Photographs	43 75	
Electric machinery (J. H. Long Machine Company)	1,006 90	
Amount paid Cutler-Hammer Manufacturing Company, testing electric machinery	136 74	
Miscellaneous repairs, Lawler Brothers	674 52	
W. H. Ellis, cleaning up flats	150 00	
Amount paid Lawler Brothers under contract for rebuilding draw span, pile bridge, etc.	\$128,152 90	
Extra work under orders of:		
December 21, 1911	255 50	
December 28, 1911	225 00	
February 13, 1912	11,997 73	
May 24, 1912	2,430 00	
June 1, 1912	6,713 98	
January 15, 1913	541 69	
	\$150,316 80	
Less amount paid, 1912	132,717 35	
		17,599 45
Amount paid Laskey & McMurrer under contract for heating apparatus	230 00	
Amount paid M. S. Kelleher for constructing drawtenders' house	\$2,259 00	
Extra work under order December 31, 1912	40 00	
	\$2,299 00	
Less amount paid in 1912	1,959 15	
		344 85
Amount paid Bay State Dredging Company under contract for dredging	324 40	
		<u>\$21,077 87</u>

Total expended to January 31, 1914, \$169,532.20.

TEMPORARY PUBLIC LANDINGS.

Engineering	\$39 00	
Amount paid W. H. Ellis under contract for construction of landings, ...	\$5,247 00	
Extra work under order February 16, 1913	258 93	
	\$5,505 93	
Less amount paid in 1912	2,675 97	
		2,829 96
Amount paid W. H. Ellis for construction of fence, ...	113 08	
Total expended to January 31, 1914, \$6,161.81.		
Amount paid Bay State Dredging Company under contract for dredging channel	495 00	
		<u>\$3,477 04</u>

BRIDGE REPAIRS. (APPROPRIATION.)

BROOKLINE STREET BRIDGE.*

Advertising	\$51 98	
Printing	21 25	
Amount paid James Doherty under contract for paving bridge	6,322 85	
Amount paid W. H. Ellis for construction of parapet	49 52	
	<u> </u>	\$6,445 60

CHARLESTOWN BRIDGE.

Paint stock	\$134 65	
Miscellaneous ironwork	47 66	
Amount paid W. A. Snow Iron Works under contract for repairing iron railings:		
Total expenditures from beginning of work to January 31, 1914	\$2,262 41	
Less payments prior to February 1, 1913	1,677 64	
	<u> </u>	584 77
Amount paid M. M. Devine under contract for cleaning and painting:		
Total expenditures from beginning of work to January 31, 1914	\$5,400 00	
Less payments prior to February 1, 1913	4,968 00	
	<u> </u>	432 00
	<u> </u>	1,199 08

HARVARD BRIDGE.*

Painting girders:		
Labor	\$148 87	
Stock	8 75	
	<u> </u>	\$157 62
Amount paid F. S. & A. D. Gore under contract for planking and paving bridge:		
Total expenditures from beginning of work to January 31, 1914	\$31,133 33	
Less payments prior to February 1, 1913	22,427 25	
	<u> </u>	8,706 08
	<u> </u>	8,863 70

L STREET BRIDGE.

General repairs	\$2,394 42	
Amount paid W. H. Ellis under contract for repairing and strengthening bridge:		
Total expenditures from beginning of work to January 31, 1914	\$51,625 58	
Less payments prior to February 1, 1913	14,300 91	
	<u> </u>	37,324 67
	<u> </u>	39,719 09
Carried forward		\$56,227 47

* Expended under direction of Boston and Cambridge Bridge Commission.

Brought forward. \$56,227 47

SPRAGUE STREET BRIDGE.

Amount paid M. S. Kelleher under contract for
planking bridge:

Total expenditures from begin-
ning of work to January 31,
1914 \$5,550 35

Less payments prior to February
1, 1913 2,463 73

3,086 62

Total \$59,314 09

Total expended to January 31, 1914, \$109,310.06.

Summary of Amounts Expended and Charged to Special Appropriations in Charge of Bridge Service.

	Balances from 1912.	Appropriations and Transfers During 1913.	Total Credits for 1913.	Expended During 1913.	Balances Unexpended January 31, 1914.	Total Expenditures to January 31, 1914.
Asland Street Bridge, sidewalk.....	\$1,955 50	.....	\$1,955 50	\$1,757 11	\$198 39	\$1,801 61
Bridge repairs.....	55,328 36	\$13,230 29	68,558 65	59,314 09	9,244 56	109,310 06
Broadway Bridge, rebuilding.....	37,160 67	115,000 00	152,160 67	3,496 69	148,663 98	4,150 71
Chelsea Bridge North.....	217,469 83	7,500 00	224,969 83	160,368 03	64,601 80	380,294 55
Chelsea Bridge South.....	.....	75,000 00	75,000 00	33,347 17	41,652 83	33,347 17
Footbridge, Dalton street to Boylston street.....	9,445 00	.....	9,445 00	.....	9,445 00	.....
Meridian Street Bridge.....	39,545 67	.....	39,545 67	21,077 87	18,467 80	109,532 20
Winthrop Bridge.....	.....	55,000 00	55,000 00	.....	55,000 00	.....
Temporary public landings.....	5,315 23	.....	5,315 23	3,477 04	1,838 19	6,161 81
	\$366,220 26	\$265,730 29	\$631,950 55	\$282,838 00	\$349,112 55	\$704,598 11

INCOME.

The total amount received by the City Collector on account of bridges was \$13,885.88, and consisted of the following items:

Amount received from the town of Milton for its portion of salary of drawtender at Granite Bridge	\$250 13
Amount received for damage to automobile	39 50
Total credited to division maintenance appropriation	\$289 63
Amount received from the Boston Elevated Railway Company for expense of strengthening L Street Bridge for street cars and credited to appropriation for Bridge Repairs	13,230 29
Amounts received and credited to general revenue:	
From sale of horses \$340 10	
From sale of old material 25 86	
	365 96
Total	<u>\$13,885 88</u>

BRIDGE SERVICE CONSTRUCTION WORK, 1913-1914.

Ashland Street Bridge (over Providence Division, New York, New Haven & Hartford Railroad).

A new sidewalk has been built on the southerly side of this bridge under a contract with the Boston Bridge Works, Inc., dated December 10, 1912. A new steel plate girder, 5 feet $4\frac{3}{4}$ inches deep and 79 feet long, was erected on the southerly street line which supports one end of the new floor beams, the other end resting on the old outside girder. These beams are 9-inch steel channels, spaced 12 feet on centers, and support the 3-inch by 12-inch yellow pine stringers. The planking is 2-inch yellow pine.

The work was completed March 24, 1913, the contract price being \$1,427.

Broadway Bridge (over Fort Point Channel).

Plans and specifications were prepared for rebuilding the draw span of this bridge and its operating machinery, and a contract was made November 20, 1913, with the Boston Bridge Works, Inc., the lowest bidder, for doing the work on itemized prices. The field work will be started early in the spring and the contract calls for the completion of the work on July 15, 1914. Plans are being made for a temporary bridge with a draw to accommodate foot traffic while the bridge is closed to travel, and the work will soon be advertised.

Chelsea Bridge South.

The draw of this bridge, which was built in 1877, has been in such condition for a number of years that it could be kept in service for the heavy traffic to which it is now subjected only by restrictions as to traffic and by constant repairing and strengthening in every way that could be devised.

Early last year it was decided that it would not be safe to keep the bridge longer in service, and plans were

accordingly prepared and a contract made with Rendle & Stoddard, under date of July 8, 1913, for building a temporary bridge to accommodate traffic until a new permanent bridge could be built. Arrangements were made by which the temporary draw, which had been used during the rebuilding of Chelsea Bridge North, could be removed to this bridge and placed on new foundations.

At the date of this report about 61 per cent of the work under the Rendle & Stoddard contract has been completed.

Chelsea Bridge North.

The work of rebuilding this bridge was done under two main contracts, Contract No. 1 covering the construction of a temporary bridge and draw span to provide for travel during the construction of the permanent bridge, building a new draw fender pier and masonry foundations for new draw span, and raising the approaches to the elevation of the new draw. Contract No. 2 covered the building of a new steel draw with the necessary mechanical and electrical equipment.

Contract No. 1.— This work was done under a contract with George T. Rendle, dated February 28, 1912, and was begun March 20, 1912. As stated in the last annual report about 80 per cent of the work had been completed on February 1, 1913, and from that date the work was continued until July 10, 1913, at which date, owing to financial difficulties in which the contractor became involved, the United States District Court appointed William E. Litchfield as receiver, and under his direction the work was continued until August 13, 1913, when, by order of the commissioner, all work was discontinued under the original contract.

A new contract was made with William E. Litchfield, dated August 15, 1913, for the completion of the work at the unit prices of the original contract. At the date of this report the work is practically completed, only cleaning up and the removal of surplus lumber remaining to be done.

The work of rebuilding replaces the single 60-foot waterway with two waterways each 125 feet wide. A new center draw fender pier, 70 feet wide and about 526½ feet long over all, was constructed and the old fender pier on the northerly side of the old waterway

was widened about 15 feet for its entire length, the old portion being practically rebuilt with the exception of the piles.

The approaches to the new draw span were rebuilt to meet the surface of the new draw, which was 10 feet 9 inches above the elevation of the old draw, the length rebuilt on the Charlestown side being about 220 feet and on the Chelsea side about 290 feet. The portions rebuilt were of the same form of construction as the old bridge with the exception of the stringers under the tracks of the street railway company, where 15-inch steel beams were used instead of yellow pine timber.

A masonry draw pier to support the new swing draw span was built 51 feet in diameter at the top. Below elevation 2, city base, the foundation of the pier was 60 feet in diameter, extending to bed rock, which was approximately 33 feet below city base. The foundation of the pier was built entirely of Portland cement concrete, held in place during construction by a curbing of 3-inch yellow pine plank, while the upper portion of the pier had a granite facing with Portland cement concrete backing.

A temporary wooden pile bridge was built on the down-stream side of the main bridge to provide for travel during the construction of the new bridge.

The total amount paid to date, under the G. T. Rendle contract and the W. E. Litchfield contract, is \$176,807.

Contract No. 2.—Bids were received June 8, 1912, for building a new steel draw with electrical equipment, and a contract was made with the Boston Bridge Works, Inc., the lowest bidder, for doing the work, dated June 22, 1912.

The work of erection under this contract was started on June 14, 1913, and the bridge opened to travel for one street car track on May 28, 1913, and opened to travel of all kinds on May 30, 1913. All work under this contract was completed on July 8, 1913.

The draw is of the rim bearing swing type, 363 feet long and 60 feet wide, center to center of railings, spanning two waterways each 125 feet wide. It has two riveted steel trusses 44 feet on centers, with steel floor beams and stringers providing a roadway 40 feet wide between curbs and two overhanging sidewalks. The width of the roadway is sufficient to take care of travel

on two car tracks and also the travel of two lines of teams simultaneously. A set of roadway gates operated by hand is provided at each approach, to shut off roadway travel when the draw is open.

The material of the draw is of steel throughout except for the wooden flooring and a patent wooden pavement. The wooden flooring is made up as follows: Eight-inch by 8-inch yellow pine ties are laid transversely of the bridge on the steel stringers, 4-inch yellow pine plank is laid longitudinally on the bridge on these ties and on the 4-inch plank is laid a wooden pavement. The street car rails are on tie plates which rest directly on the 8-inch by 8-inch ties. The pavement is of the Shuman "W. & A." type, consisting of wooden slabs about 6 feet long by 2 feet wide, made of hard maple strips 1 inch thick by $3\frac{7}{8}$ inches wide, coated with asphalt, laid on edge and tightly bolted together with iron bolts. The slabs are fastened to the 4-inch wood plank floor by toe-nailing. The sidewalks surface consists of 2-inch yellow pine plank.

The draw weighing about 1,400 tons is carried on 64 steel wheels running between steel faced tracks. Power for swinging is supplied by two 28 horse power motors, one on either side, located on a floor inside the cross girders on top of the drum. Each motor is geared through a set of steel gears to a pinion which engages a rack on the lower or fixed track. One motor with one set of gearing will operate the draw in case of temporary disablement of the other, or the draw can be swung by man power in case of entire suspension of electric current.

A centering device consisting of a bolt with a roll in the outer end, actuated by an air cylinder, the roll engaging a V-casting on the landing, is used for accurately centering the draw when it is stopped within ten or twelve inches of the exact center. Air for the centering device and air brakes is generated by a Westinghouse air brake pump with necessary receivers, valves, etc., located on the floor with the turning motors.

After swinging, the ends of the draw are lifted $\frac{3}{4}$ of an inch to 1 inch, this lift taking out part of the deflection and being found sufficient—the trusses being continuous—to offer stability under all loadings; the load lifted varying from 50 tons for minimum lift to 80 tons for maximum lift per end. The device for lifting is new and worthy of special mention. A double toggle joint,

in effect, lifts the load on a roll bearing on the landing block, after which a flat block is inserted and the roll partially withdrawn, thus transferring the load to the flat block. These lifts are actuated through a shaft and gearing by one 8 horse power motor at either end, located on a platform under the deck of the bridge. They are controlled by a mechanical automatic device which is geared direct to the motor and limits the amount of travel of the bearing block in either direction.

The operating room is in the tower some 34 feet above the deck. In this room within easy reach of the operator is the switch board on which is mounted the necessary switches, fuses, circuit breakers, and meters for all motors, lights and heating; also the operating board to which is attached the controllers for the turning and end lift motors and on which are mounted the valves for operating the centering device, the air brake valve, the electrical signals for showing the position of the draw, and the liquid indicators for showing the position of the end lifts and centering bolt, also an air gauge, whistle valve, telephone, speaking tubes, etc.

The current used for all motors is 550 volt direct current. Air pressure 100 pounds. Amount of current for swinging 60 amperes at start to 40 amperes for a period of not over 3 minutes per opening. Current for end lift motors 12 amperes, for two periods of 15 seconds per opening. The air compressor uses 6 amperes for not over two minutes per opening. Time for complete opening 4 to 5 minutes if not delayed by the shipping.

The total payments under Contract No. 2 amount to \$121,691.71.

It was necessary in conforming to the requirements of the United States War Department to rebuild the water pipe tunnel belonging to the Metropolitan Water Works, which crosses the river parallel to the bridge. This work was done under the direction of the Metropolitan Water and Sewerage Board. The cost of this work to January 1, 1914, was \$51,244.15.

L Street Bridge.

As stated in the last annual report, a contract was made with W. H. Ellis, dated October 11, 1912, for repairing and strengthening the pile bridge. The strengthening was done to allow the bridge to carry 42-ton street cars, and the cost of this part of the work,

amounting to \$13,230.29, was paid by the Boston Elevated Railway Company. The roadway paving, sidewalks, the entire roadway flooring, most of the stringers and part of the sidewalk bulkhead and fences were renewed; 168 oak piles were driven, some to carry the street cars, others to replace those that had been eaten by the *limnoria*; additional stringers were furnished under the lines of car rails. The draw landing and some of the supports for the draw were built of steel, the tracks were repaired and the draw pit was replanked. Asphalt sidewalks were also laid. The 6-inch roadway flooring was mopped with asphalt and covered with four thicknesses of roofing felt, each layer being mopped with asphalt. Oak ties, embedded in concrete were laid for supports for the street car rails, which were laid by the Boston Elevated Railway Company. The rest of the roadway flooring was covered with 1 inch of asphalt mastic. The granite blocks removed from the old bridge were relaid on a sand bed, the joints being filled with pebbles and half made stuff.

The work was completed September 3, 1913, at a cost to the city, for contract work, of \$51,625.58.

Pleasant Street Bridge (over the Subway).

In connection with the widening of Pleasant Street Bridge, it was necessary to entirely remove the surface of the old bridge over the entrance to the subway at this point, and build an addition on the northerly side of the bridge about 25 feet in width. The construction of the new portion is substantially the same as the old portion, reinforced concrete being substituted for brick arches between the steel beams. The roadway is paved with wood blocks and the sidewalks are of granolithic. The work, with the exception of the wood pavement, was done under a contract with W. A. & H. A. Root, Inc., dated June 21, 1913, and was completed November 19, 1913. The amount paid under the contract for the bridge was \$4,736.15.

The same contractor, at the time of building the bridge, laid two lines of 20-inch cast-iron pipe for sewer connection under the bridge at a cost of \$934.06, exclusive of the cost of the pipe.

Saratoga Street Bridge (over Boston, Revere Beach & Lynn Railroad, East Boston).

This bridge was built by the railroad company under a decree of the Superior Court abolishing the grade

crossing at this point, and was opened to travel September 18, 1913. The bridge consists of two pony trusses of 88 feet span center to center of end bearings and 17 feet 6 inches deep center to center of chords. The bridge is 50 feet wide between end railings, providing a roadway 32 feet 6 inches wide in the clear and two overhanging sidewalks each about 6 feet wide in the clear. The floor beams are built steel beams about 2 feet 9 inches deep and support steel I-beam stringers. All steel work below the surface of the street is encased in concrete. The roadway pavement is of brick and the sidewalks of granolithic.

PUBLIC BOAT LANDINGS.

Two public boat landings, one located at Summer Street Bridge and one at Northern Avenue Bridge, built under a contract with W. H. Ellis, dated October 28, 1912, were completed on April 11, 1913. The total amount paid for both landings under the contract was \$5,505.93.

LAWNDALE TERRACE SUBWAY.

The work on this subway, which was under contract at the beginning of the fiscal year, was completed on March 28, 1913. The total amount paid under the contract was \$6,921.

MISCELLANEOUS WORK.

The comprehensive survey of Mount Hope Cemetery in progress at the beginning of the year, as mentioned in last year's report, has been continued during the present year, and a set of sectional plans showing the location of each individual lot, as well as paths and drives, will be completed early in the coming year.

The work of rebuilding the power plant at Rainsford Island, for the Children's Institutions Department, in charge of this division, under contract with the Fitchburg Steam Engine Company, was completed on April 15, 1913, at a cost of \$2,148. The boiler for this plant was furnished by the Hodge Boiler Works under a contract dated August 4, 1913. The work was completed November 24, 1913. The total amount paid under the contract was \$1,792.82.

The bridge on Tremont street, over the Boston & Albany Railroad, carrying the water pipes, was repaired under a contract with the Boston Bridge Works, Inc.,

dated July 8, 1913, new steel beam supports for the pipes being furnished at a cost of \$748. The bridge at the same time was thoroughly cleaned by the sand blast process and painted under a contract with the W. L. Waples Company for \$260, the city furnishing the paint required.

LIST OF BOSTON BRIDGES.

I.—BRIDGES WHOLLY MAINTAINED BY BOSTON.

[In the list those marked with an asterisk (*) are over navigable waters, and are each provided with a draw.]

In Charge of Bridge and Ferry Division.

- Allston, over Boston & Albany Railroad at Cambridge street, Brighton.
- Ashland street, over New York, New Haven & Hartford Railroad, Providence Division, West Roxbury.
- Athens street, over New York, New Haven & Hartford Railroad, Midland Division.
- * Atlantic avenue, over Fort Point channel.
- B street (footbridge), over Neponset river, Hyde Park.
- Baker street, at Brook Farm, West Roxbury.
- Beacon street, over outlet to Back Bay Fens.
- Beacon street, over Boston & Albany Railroad.
- Bennington street, over Boston, Revere Beach & Lynn Railroad.
- Berkeley street, over Boston & Albany Railroad.
- Berwick park (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.
- Blakemore street, over New York, New Haven & Hartford Railroad, Providence Division.
- Bolton street, over New York, New Haven & Hartford Railroad, Midland Division.
- Boylston street, over Boston & Albany Railroad.
- Broadway, over Boston & Albany Railroad.
- * Broadway, over Fort Point channel.
- Brookline avenue, over Boston & Albany Railroad.
- Brooks street, Brighton.
- Byron street, over Boston, Revere Beach & Lynn Railroad.
- Charlesgate, over Ipswich street.
- * Charlestown, from Boston to Charlestown.
- * Chelsea South, over south channel, Mystic river.
- * Chelsea street, from East Boston to Chelsea.
- Columbus avenue, over Boston & Albany Railroad.
- * Commercial Point, or Tenean, Dorchester.
- * Congress street, over Fort Point channel.
- Cottage Farm, over Boston & Albany Railroad, at Commonwealth avenue.

- Dana avenue, over Neponset river, Hyde Park.
Dartmouth street, over Boston & Albany Railroad.
* Dorchester avenue (formerly Federal street), over Fort Point channel.
* Dover street, over Fort Point channel.
Fairmount avenue, over Neponset river, Hyde Park.
Ferdinand street, over Boston & Albany Railroad.
Florence street, over Stony brook, West Roxbury.
Gainsborough street (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.
Glenwood Avenue East (footbridge), over Neponset river, Hyde Park.
Glenwood Avenue West, over Mother brook, Hyde Park.
Gold street, over New York, New Haven & Hartford Railroad, Midland Division.
Huntington avenue, over Boston & Albany Railroad.
Huntington avenue, over Stony brook, Hyde Park.
Hyde Park avenue, over Mother brook (at woolen mill), Hyde Park.
Hyde Park avenue, over Stony brook, West Roxbury.
Hyde Park avenue, over Stony brook (near Clarendon Hills Station), Hyde Park.
Ipswich street, over waterway.
Irvington street (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.
* L street, over Reserved channel, South Boston.
* Malden, from Charlestown to Everett.
Massachusetts avenue, over Boston & Albany Railroad.
Massachusetts avenue, over New York, New Haven & Hartford Railroad, Providence Division.
* Meridian street, from East Boston to Chelsea.
Metropolitan avenue (near Clarendon Hills Station), Hyde Park.
Newburn street, over Stony brook, Hyde Park.
* Northern avenue, over Fort Point channel.
Shawmut avenue, over Boston & Albany Railroad and New York, New Haven & Hartford Railroad, Providence Division.
Southampton street, over South Bay sluice.
Summer street, over A street.
Summer street, over B street.
Summer street, over C street.
* Summer street, over Fort Point channel.
Tollgate way (footbridge), over Providence Division, from Washington street to Hyde Park avenue, Forest Hills.
* Warren, from Boston to Charlestown.
West Newton street, over New York, New Haven & Hartford Railroad, Providence Division.
West River street, over Mother brook, Hyde Park.
West Rutland square (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.
Winthrop, from Breed's Island to Winthrop.

In Charge of Bridge and Ferry Division and Park and Recreation Department.

Columbia road, over New York, New Haven & Hartford Railroad, Old Colony Division.

Columbia road, over Shoreham street.

In Charge of Park and Recreation Department.

Agassiz road, in Fens.

Audubon road, in Riverway, over Boston & Albany Railroad.

Berners street (footbridge), over Bridle Path in Riverway.

Boylston street, in Fens, over waterway.

Bridle path, in Riverway, over Muddy river.

* Castle Island (footbridge), in Marine Park, South Boston, to Castle Island.

Charlesgate, in Fens, over Boston & Albany Railroad.

Circuit drive, over Scarboro pond, in Franklin Park.

Commonwealth avenue, in Fens, over waterway.

Ellicott Arch, in Franklin Park.

Fens, in Fens.

Forest Hills entrance, in Franklin Park.

Leverett pond (footbridge), in Olmsted Park.

Neptune road, in Wood Island Park, over Boston, Revere Beach & Lynn Railroad.

Public Garden (footbridge).

Scarboro pond (footbridge), in Franklin Park.

Wood Island (footbridge), in Wood Island Park.

II.— BRIDGES OF WHICH BOSTON MAINTAINS THE PART WITHIN ITS LIMITS.

In Charge of Bridge and Ferry Division.

Central avenue, from Dorchester to Milton.

* Chelsea North, from Charlestown to Chelsea.

* Granite, from Dorchester to Milton.

Milton, from Dorchester to Milton.

* Neponset, from Dorchester to Quincy.

* North Beacon street, from Brighton to Watertown.

Paul's Bridge over Neponset river, Hyde Park.

Spring street, from West Roxbury to Dedham.

* Western avenue, from Brighton to Watertown.

In Charge of Park and Recreation Department.

Bellevue street, in the Riverway, over Muddy river.

Berners street (footbridge), over Muddy river.

Brookline avenue, in the Riverway, over Muddy river.

Huntington avenue, in the Riverway, over Muddy river.

Longwood avenue, in the Riverway, over Muddy river.

III.—BRIDGES OF WHICH BOSTON PAYS A PART OF THE COST OF MAINTENANCE.

In Charge of Bridge and Ferry Division.

Albany street, over Boston & Albany Railroad (over freight tracks).

Ashmont street and Dorchester avenue, over New York, New Haven & Hartford Railroad, Old Colony Division.

Harvard street, over New York, New Haven & Hartford Railroad, Midland Division.

Norfolk street, over New York, New Haven & Hartford Railroad, Midland Division, near Dorchester station.

Pleasant street, over the subway.

In Charge of Commissioners for Boston and Cambridge Bridges.

Anderson Bridge, from Brighton to Cambridge.

Brookline street, from Brighton to Cambridge.

Cambridge, from Boston to Cambridge.

* Cambridge street, from Brighton to Cambridge.

* Harvard, from Boston to Cambridge.

* Prison Point, from Charlestown to Cambridge.

* Western avenue, from Brighton to Cambridge.

IV.—BRIDGES OF WHICH BOSTON MAINTAINS THE WHOLE OR A PART OF THE WEARING SURFACE.

In Charge of Bridge and Ferry Division.

Austin street, over Boston & Maine Railroad, Charlestown.

Bennington street, over Boston & Albany Railroad.

Blue Hill avenue, over New York, New Haven & Hartford Railroad, Midland Division.

Boston street, over New York, New Haven & Hartford Railroad, Old Colony Division.

Brookline street, Brighton to Cambridge, portion over Boston & Albany Railroad.

Cambridge street, Charlestown, over Boston & Maine Railroad.

Chelsea, over Boston & Maine Railroad.

Curtis street, East Boston, over Boston & Albany Railroad.

Dana avenue, over New York, New Haven & Hartford Railroad, Midland Division, Hyde Park.

Dorchester avenue, over New York, New Haven & Hartford Railroad, Old Colony Division.

Everett street, over Boston & Albany Railroad, Brighton.

Fairmount avenue, over New York, New Haven & Hartford Railroad, Midland Division, and Station street, Hyde Park.

Glenwood Avenue West, over passageway connecting land of the New York, New Haven & Hartford Railroad, Hyde Park.

Hyde Park avenue, over proposed electric connection between Midland and Providence Divisions, New York, New Haven & Hartford Railroad, Hyde Park.

Maverick street, East Boston, over Boston & Albany Railroad.

Mystic avenue, over Boston & Maine and Boston & Albany Railroads.

New Way at Neponset, over New York, New Haven & Hartford Railroad, Old Colony Division.

Norfolk street, over New York, New Haven & Hartford Railroad, Midland Division, near Blue Hill avenue station.

Oakland street, over New York, New Haven & Hartford Railroad, Midland Division, Mattapan.

Porter street, over Boston & Albany Railroad.

Prescott street, over Boston & Albany Railroad.

Reservoir road, Brighton, over Boston & Albany Railroad, Newton Branch.

Saratoga street, over Boston & Albany Railroad.

Saratoga street, over Boston, Revere Beach & Lynn Railroad, East Boston.

Southampton street, over New York, New Haven & Hartford Railroad, Old Colony Division.

Sprague street, over New York, New Haven & Hartford Railroad, Midland Division, and branch of Providence Division, Hyde Park.

Summer street, over New York, New Haven & Hartford Railroad, Midland Division.

Summer street, East Boston, over Boston & Albany Railroad.

West Fourth street, over New York, New Haven & Hartford Railroad, Old Colony Division.

V.—BRIDGES MAINTAINED BY METROPOLITAN PARK COMMISSION.

Charles River Dam.

Mattapan, over Neponset river.

VI.—BRIDGES MAINTAINED BY RAILROAD CORPORATIONS.

1st.—Boston & Albany Railroad.

Albany street (over passenger tracks).

Harrison avenue.

Market street, Brighton.

Tremont street.

Washington street.

Webster street (footbridge), East Boston.

2d.—Boston & Maine and Boston & Albany Railroads.

Main street.

Perkins street (footbridge).

3d.—*Boston & Maine Railroad, Eastern Division.*
Wauwatosa avenue, East Boston.

4th.—*Boston, Revere Beach & Lynn Railroad.*
Everett street.

5th.—*New York, New Haven & Hartford Railroad, Midland Division.*

Dorchester avenue.
East River street, at River Street Station, Hyde Park.
Morton street, Dorchester.
Silver street.
Washington street, Dorchester.
West Broadway.
West Fifth street.
West Fourth street.
West Second street.
West Sixth street.
West Third street.

6th.—*New York, New Haven & Hartford Railroad, Old Colony Division.*

Adams street.
Cedar Grove Cemetery.
Medway street.
Savin Hill avenue.

7th.—*New York, New Haven & Hartford Railroad, Providence Division.*

Albany street.
Baker street, West Roxbury.
Beech street, West Roxbury.
Bellevue street, West Roxbury.
Berkeley street.
Broadway.
Canterbury street, West Roxbury.
Castle square.
Centre and Mt. Vernon streets, West Roxbury.
Columbus avenue.
Dartmouth street.
Gardner street, West Roxbury.
Harrison avenue.
Milton street, Hyde Park.
New Allen street, Hyde Park.
Park street, West Roxbury.
Walworth street, West Roxbury.
Washington street.
West street, Hyde Park.
West River street, Hyde Park.

RECAPITULATION OF BRIDGES.

I. Number wholly maintained by Boston:		
In charge of Bridge and Ferry Division	65	
In charge of Bridge and Ferry Division and Park and Recreation Department	2	
In charge of Park and Recreation Department	17	
	—	84
II. Number of which Boston maintains the part within its limits:		
In charge of Bridge and Ferry Division	9	
In charge of Park and Recreation Department	5	
	—	14
III. Number of which Boston pays a part of the cost of maintenance:		
In charge of Bridge and Ferry Division	5	
In charge of Commissioners for Boston and Cambridge Bridges *	7	
	—	12
IV. Number of which Boston maintains the whole or a part of the wearing surface		29
V. Number maintained by Metropolitan Park Commission		2
VI. Number maintained by railroad corporations:		
1. Boston & Albany Railroad	6	
2. Boston & Maine and Boston & Albany Railroads	2	
3. Boston & Maine Railroad, Eastern Division	1	
4. Boston, Revere Beach & Lynn Railroad, Midland Division	11	
5. New York, New Haven & Hartford Railroad, Old Colony Division	4	
6. New York, New Haven & Hartford Railroad, Providence Division	20	
	—	45
Total number		<u>186</u>

* Including Anderson Bridge at Soldiers Field, now under construction, which will be maintained by the commissioners upon its completion.

List of Small Bridges or Culverts having Wooden Tops which are Repaired by Bridge and Ferry Division
(Bridge Service).—Walls Repaired and Openings Cleaned by Sewer Service.

LOCATION.	Span, Feet.	Height of Opening, Feet.	Length, Feet.	Side Walls.	Covering.
Asland and Canterbury streets, near Calvary Cemetery, West Roxbury,	7.6	5.5	75	Stone.	Wood.
Beech street, near Anawan avenue, at Central Station, West Roxbury...	4.0	4.0	50	Stone.	Wood.
Cass street, near Spring Street Station, West Roxbury.....	7.0	3.0	21	Stone.	Wood.
Cohasset street, Roslindale.....	14.0	7.5	60	Stone.	Wood.
Jamaica street, Jamaica Plain.....	10.0	4.0	39	Stone.	Wood.
Park street, west of Dorchester avenue, Dorchester.....	5.0	3.7	50	Stone.	Wood.
Park street, west of New York, New Haven & Hartford Railroad, Dor...	8.5	5.0	50	Stone.	Wood.
Spring street, near Spring Street Station, West Roxbury.....	2.7	2.7	63	Stone.	Wood.
Summer street, near Spring Street Station, West Roxbury.....	4.0	4.5	40	Stone.	Wood.
Williams street, at Stony brook, West Roxbury.....	5.0	5.0	50	Wood.	Wood.
Woodman street, Jamaica Plain.....	6.3	4.0	65	Stone.	Wood.

**Table Showing the Widths of Openings for Vessels in all Bridges
Provided with Draws in the City of Boston in January, 1914.**

NAME OF BRIDGE.	Location.	Number of Openings.	Width.
* Anderson.....	Brighton to Cambridge.....	1	45 feet 0 inches.
Atlantic avenue.....	Over Fort Point channel,....	1	42 " 6 "
Boston Elevated Railway.....	Boston to East Cambridge....	1	45 " 0 "
Boston & Maine Railroad, Eastern Division.	Boston to Charlestown.....	1	39 " 8 "
Boston & Maine Railroad, Eastern Division.	Over Miller's river.....	1	35 " 0 "
Boston & Maine Railroad, Fitchburg Division.	Boston to Charlestown.....	1	36 " 9 "
Boston & Maine Railroad, Fitchburg Division (for teaming freight).	" "	1	36 " 7 "
Boston & Maine Railroad (freight), Southern Division.	Boston to East Cambridge....	1	40 " 0 "
Boston & Maine Railroad (passenger), Southern Division.	" "	1	39 " 8 "
Boston & Maine Railroad, Western Division.	Boston to Charlestown.....	1	39 " 6 "
Boston & Maine Railroad, Western Division.	Over Miller's river.....	1	36 " 3 "
Broadway.....	Over Fort Point channel,....	1	42 " 11 "
† Brookline street.....	Brighton to Cambridge.....	1	40 " 0 "
† Cambridge.....	Boston to Cambridge.....	1	50 " 0 "
Cambridge street.....	Brighton to Cambridge.....	1	36 " 6 "
Charles River Dam (lock).....	Boston to East Cambridge....	1	45 " 0 "
Charlestown (main channel).....	Boston to Charlestown.....	2	50 " 0 "
Charlestown (north channel).....	" "	49	" 9 "
Chelsea (north channel).....	Charlestown to Chelsea.....	2	125 " 0 "
‡ Chelsea (south channel).....	" "	1	38 " 9 "
Chelsea street.....	East Boston to Chelsea.....	1	60 " 0 "
Commercial Point (or Tenean).....	Dorchester.....	1	24 " 0 "
Congress street.....	Over Fort Point channel,....	1	50 " 0 "
Dorchester avenue.....	" "	1	41 " 3 "
Dover street.....	" "	1	40 " 3 "
Grand Junction Railroad.....	Brighton to Cambridge.....	1	39 " 3 "
Grand Junction Railroad.....	East Boston to Chelsea.....	1	60 " 0 "
Granite.....	Dorchester to Milton.....	1	36 " 0 "
Harvard (Boston side).....	Boston to Cambridge.....	2	36 " 7 "

* Drawless opening; clear headroom of 12 feet above basin level (about elevation 8.0).

† Drawless opening; clear headroom of 28 feet above basin level.

‡ Opening to be widened to 47 feet 6 inches upon completion of temporary bridge.

Table Showing Widths of Openings, etc.—*Concluded.*

NAME OF BRIDGE.	Location.	Number of Openings.	Width.
Harvard (Cambridge side).....	Boston to Cambridge.....	.....	37 feet 0 inches.
L street.....	Over Reserved channel, South Boston.	1	39 " 3 "
Malden.....	Charlestown to Everett.....	1	50 " 0 "
Meridian street.....	East Boston to Chelsea.....	1	100 " 0 "
Neponset.....	Dorchester to Quincy.....	1	36 " 0 "
New York, New Haven & Hartford Railroad.	Over Fort Point channel....	1	42 " 0 "
New York, New Haven & Hartford Railroad, Y-connection.	" ".....	1	42 " 0 "
New York, New Haven & Hartford Railroad, Plymouth Division.	Dorchester to Quincy.....	1	51 " 0 "
North Beacon street.....	Brighton to Watertown.....	1	30 " 0 "
Northern avenue.....	Over Fort Point channel....	2	75 " 3 "
Prison Point.....	Charlestown to Cambridge...	1	37 " 5 "
Summer street.....	Over Fort Point channel.....	1	50 " 0 "
Warren.....	Boston to Charlestown.....	1	36 " 0 "
Western avenue.....	Brighton to Cambridge.....	1	36 " 3 "
Western avenue.....	Brighton to Watertown.....	1	36 " 0 "

Summary of Drawtenders' Report.

Number of Vessels Passing Through the Drawbridges Controlled by the City of Boston, February 1, 1913, to January 31, 1914, Inclusive.

	STEAMERS.			SAILING VESSELS.			TUGS.			ALL OTHERS.			TOTAL NUMBER VESSELS.			Total Number of Cargoes.	Total Number of Openings.
	By Day.	By Night.	Total.	By Day.	By Night.	Total.	By Day.	By Night.	Total.	By Day.	By Night.	Total.	By Day.	By Night.	Total.		
BRIDGE.																	
Atlantic avenue	57	11	68	662	41	703	4,000	392	4,392	1,805	143	1,948	6,524	587	7,111	1,406	3,595
Broadway	86	19	105	698	8	706	4,235	114	4,349	1,891	51	1,942	6,910	192	7,102	1,418	2,544
Charlestown	2	.....	2	413	29	442	3,052	300	3,352	1,779	222	2,001	5,246	551	5,797	1,186	2,130
Chelsea North	751	202	953	560	66	626	10,700	1,932	12,632	5,163	798	5,961	17,174	2,998	20,172	4,439	8,580
Chelsea South	46	3	49	265	11	276	6,804	556	7,360	5,016	377	5,393	12,131	947	13,078	3,709	5,551
Chelsea street	9	37	46	.....	1	1	571	436	1,007	552	518	1,070	1,132	992	2,124	490	1,159
Congress street	191	26	217	768	54	822	5,873	630	6,503	2,314	189	2,503	9,146	899	10,045	1,433	5,217
Dorchester avenue	55	11	66	666	40	706	3,992	386	4,378	1,846	146	1,992	6,559	583	7,142	1,397	3,822
Dover street	36	10	46	631	43	674	3,653	316	3,969	1,612	107	1,719	5,932	476	6,408	1,215	2,837
Granite avenue .....	.....	.....	.....	2	.....	2	288	.....	288	164	4	168	454	4	458	48	221
L street .....	.....	.....	.....	214	36	250	3,019	127	3,146	2,024	180	2,204	5,257	343	5,600	794	3,949
Malden .....	.....	.....	.....	25	2	27	1,126	55	1,181	660	89	749	1,811	146	1,957	381	1,157
Meridian street	552	263	815	304	69	373	9,442	2,781	12,223	4,784	1,456	6,240	15,082	4,569	19,651	3,298	11,116
Neponset .....	.....	.....	.....	4	.....	4	384	.....	384	375	.....	375	763	.....	763	53	498
North Beacon street .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern avenue	759	359	1,118	793	56	849	9,134	1,482	10,616	3,943	659	4,602	14,629	2,556	17,185	2,493	7,879
Summer street	191	26	217	768	54	822	5,861	630	6,491	2,313	189	2,502	9,133	899	10,032	1,433	5,196
Warren	53	14	67	412	30	442	2,941	280	3,221	1,649	191	1,840	5,055	515	5,570	1,108	3,248
Western avenue to Watertown .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	2,788	981	3,769	7,185	540	7,725	75,075	10,417	85,492	37,890	5,319	43,209	122,938	17,257	140,195	26,310	68,699

ELEVATIONS AND DATUM PLANES REFERRED TO BOSTON CITY BASE.

Feet.

- * 0.00 Boston city base. This base is used by the towns of Brookline and Watertown and the cities of Chelsea, Everett, Malden, Newton and Waltham.
- 4.98 Cambridge city base.
- +0.64 Somerville city base.
- 0.00 Metropolitan Park Commission base.
- +0.60 Harbor and Land Commission and Directors of the Port of Boston base.
- 0.00 Metropolitan Water Board base.
- 100.00 Metropolitan Sewerage Board base.
- 100.00 Boston Transit Commission base.
- 100.00 Charles River Commission base.
- 15.45 Old bench mark on coping of old dry dock at Charlestown Navy Yard.
- 15.11 New bench mark on coping of old dry dock at Charlestown Navy Yard, northwest end over crowfoot.
- 5.00 Piles to be cut off for buildings.
- 12.00 Minimum cellar bottom elevation when not waterproofed.
- 9.82 South Boston base. Formerly in use, now abandoned.
- 0.00 Mean low water about 1830.†
- +0.34 Mean low water, 1867.†
- +0.79 Mean low water, 1902.†
- +0.58 Navy Yard base, 1902.†
- 10.63 Mean high water, 1902.†
- 5.71 Mean sea level, 1902.†
- 9.84 Mean rise and fall of tide, 1902.†

* Definition of Boston city base: "Boston city base is a datum plane 15 feet above the average height of the sill of the Charlestown dry dock." (Page 552, report of Committee on Charles River Dam, 1903.)

† John R. Freeman, civil engineer, in report to Committee on Charles River Dam, 1903, pp. 562, 569, 570.

HIGHEST RECORDED TIDES.

Feet.

- 15.62 April 16, 1851, average of seven observations, North Market street and vicinity, leveled on in 1854 by Charles Harris, Surveying Division n. b. 22, p. 54 (15.10 above mean low water, United States Coast Survey Chart of Boston Harbor, 1857).
- 15.64 December 26, 1909, average of twenty-nine observations, on water front, Nut Island to Deer Island, elevations determined in most cases by John H. Edmonds, before January 1, 1910, from points put in for that purpose, 1902 to 1905.
- 15.50 Actual elevation at North Ferry, Boston proper, as observed on staff gauge, at high water.
- From comparison of contemporary diary and newspaper accounts the only tide of this class, prior to 1851, found by John H. Edmonds, was that of February 24, 1722-23, which was in all probability about 16.00.

The following tidal records may be of interest:

High Tides.

[Plane of Reference, Boston City Base.]

FEET.	Date.	Where Taken.	By Whom.
16.00	Feb. 24, 1722-23.	* By comparison.....	J. H. Edmonds.
15.62	April 16, 1851....	* Average of 7 observations.....	Charles Harris.
15.74	April 16, 1851....	Navy Yard, staff gauge.....	Isaac Williams.
14.94	Nov. 27, 1898....	Average of 15 observations.	
13.72	Nov. 8, 1900....	Malden Bridge.....	F. P. Spalding.
14.19	Nov. 25, 1901....	Average of 10 observations.	
13.60	Dec. 14, 1902....	Average of 11 observations.	
13.00	Feb. 17, 1903....	North Ferry, Boston proper.....	J. H. Edmonds.
13.40	Jan. 14, 1904....	North Ferry, Boston proper.....	J. H. Edmonds.
14.83	Jan. 25, 1905....	Average of 34 observations.	
14.70	Jan. 25, 1905....	Inner harbor, 10 observations.	
14.70	Jan. 25, 1905....	North Ferry, Boston proper.....	J. H. Edmonds.
13.50	Nov. 15, 1906....	Neponset Bridge.....	M. F. Toomey.
13.00	April 9, 1907....	North Ferry, Boston proper.....	J. H. Edmonds.

* See previous table.

High Tides.—Concluded.

FEET.	Date.	Where Taken.	By Whom.
13.10	Nov. 24, 1909....	North Ferry, Boston proper.....	J. H. Edmonds.
13.35	Nov. 25, 1909....	North Ferry, Boston proper.....	J. H. Edmonds.
13.10	Nov. 27, 1909....	North Ferry, Boston proper.....	J. H. Edmonds.
13.00	Nov. 28, 1909....	North Ferry, Boston proper.....	J. H. Edmonds.
15.64	Dec. 26, 1909....	* Average of 29 observations.	
15.50	Dec. 26, 1909....	North Ferry, Boston proper (a. m.).....	J. H. Edmonds.
11.90	Dec. 26, 1909....	North Ferry, Boston proper (p. m.).....	J. H. Edmonds.
13.45	Feb. 12, 1910....	North Ferry, Boston proper.....	J. H. Edmonds.
13.35	Oct. 21, 1910....	North Ferry, Boston proper.....	J. H. Edmonds.
13.50	Dec. 26, 1913....	North Ferry, Boston proper.....	F. P. Spalding.

* See previous table.

Low Tides.

5.60	Feb. 27, 1898....	Deer Island, metropolitan sewer station....	Self-recording gauge.
—3.50	Feb. 1, 1900....	Deer Island, metropolitan sewer station....	Self-recording gauge.
—2.94	Feb. 3, 1900....	South Boston station, Edison Electric.....	D. A. Harrington.
—3.00	Feb. 4, 1904....	Deer Island, metropolitan sewer station....	Self-recording gauge.
—2.70	Mar. 23, 1905....	Deer Island, metropolitan sewer station....	Self-recording gauge.

FERRY SERVICE.

An improvement in the administration of the Ferry Service was made in November, 1913, when a new system of checking the receipts from team traffic, collected by the gatemen, was put into effect. Under this system the gateman delivers to the driver of each vehicle a check punched to indicate the amount of fare collected and whether the fare was paid by ticket or in cash. These checks are collected as the vehicles go aboard the boat, examined to see that they are properly punched, and deposited in a locked box which is collected daily and taken to the main office of the Ferry Service. Each day the checks are carefully sorted and counted in the ferry office and compared with the gatemen's returns by ticket and by cash. The checks bear serial numbers and every check must be accounted for. The results by this system have proven satisfactory, but a considerable expense is involved in the matter of printing (about 1,200,000 checks being required annually), and in the labor involved in sorting the checks and verifying the returns in the ferry office. A second and less expensive method of checking the gatemen's collections is to be put into effect February 1, by which the captain or quartermaster of each boat is to keep a record of each class of vehicles as they come aboard the boat. If, after a fair trial, it should be found that accurate results can be had by this second method, it is probable that for reasons of economy the abolition of the first system, now in use, will be recommended.

At the beginning of the year the rebuilding of the north pier of the South Ferry, Boston side, was in progress under a contract with W. H. Ellis, the work being paid for out of a special appropriation for ferry landings repairs. This work was completed March 17, 1913, the amount paid under the contract being \$5,966.31.

From the regular maintenance appropriation, extensive repairs were made on the north drop at the Boston side and the south drop and landing at the East Boston side of the North Ferry, and a new type of paving, affording an excellent foothold for horses, which had

been tried out on some of the drops the previous year, was laid on two additional drops.

A large amount of repair work was done upon the boats, all of which were hauled out for repairs and inspection during the year, either upon the Atlantic Works railway or in Simpson's dry dock and the boats are now in much better condition than at the time of the organization of the Public Works Department in 1911. With the exception of extensive repairs to the "Hugh O'Brien," on which it will be necessary to relay an entire new roadway deck and to make many other repairs, it is probable that the cost of boat repairs in 1914 will not be large.

As mentioned in the Division Engineer's report, the ferryboat "D. D. Kelly," which has been in service for thirty-five years, has reached such a condition that at any time it may be condemned for ferry use, and a new boat is needed to replace the "D. D. Kelly." Recommendations for the more important repairs needed at the ferries are given in the report of the Division Engineer.

The property of the Ferry Service is as follows:

South Ferry, East Boston side.—Located at the termination of Lewis street and covers an area of 58,725 square feet of land and water. On these premises are one head-house with canopies, one workshop, one storehouse, one modern coal pocket, three piers which form the two slips, two drops and tanks, one wharf and dock where boats are laid while not in use or while undergoing repairs.

South Ferry, Boston side.—Located at the termination of Eastern avenue and covers an area of 38,135 square feet of land and water, on which are one head-house with canopies, one gate room, three piers which form the two slips, and two drops and tanks.

North Ferry, Boston side.—Located at the termination of Battery street and covers an area of 45,000 square feet of land and water, on which are one head-house with canopies, one gate room, three piers which form the two slips, and two drops and tanks.

North Ferry, East Boston side.—Located at the termination of Border street and covers an area of 62,138 square feet of land and water, on which are one head-house with canopies, one boiler and room, one coal pocket, three piers which form the two slips, and two drops and tanks.

The following steam ferryboats are in commission:

Name.	When Built.	Kind.	Length.
D. D. Kelley.....	1879	Side wheel	160 ft. 3 in.
Hugh O'Brien.....	1883	"	175 " 6 "
General Hancock.....	1887	"	160 " 3 "
Governor Russell.....	1898	Propeller	164 " 3 "
Noddle Island.....	1899	"	164 " 3 "
General Sumner.....	1900	"	164 " 3 "
John H. Sullivan.....	1912	"	172 " 3 "

**FINANCIAL STATEMENT FOR THE YEAR ENDING
JANUARY 31, 1914.**

1. Receipts.

Total cash receipts during the year	\$106,327 08
Cash in hands of tollmen at beginning of year	200 00
	<u>\$106,527 08</u>
Cash paid over to City Collector	\$105,937 02
Cash in hands of tollmen January 31, 1914	200 00
Cash in hands of cashier January 31, 1914 (balance)	390 06
	<u>\$106,527 08</u>

2. Appropriations and Expenditures.

Balance unexpended from previous years (special appropriations)	\$8,048 11
Received from annual appropriation (part of appropriation) for Bridge and Ferry Division	277,727 39
Total appropriations	<u>\$285,775 50</u>
Total expenditures	285,259 90
Balance unexpended (special appropriations)	<u>\$515 60</u>

3. Result of Operations for the Year.

Receipts for the year (net income)	\$106,327 08
Ordinary expenses	\$277,727 39
Interest on ferry debt	16,155 00
Cost of repairing ferry landings	7,532 51
Decrease in valuation of real estate per assessors*	31,600 00
Depreciation of ferryboats	16,061 15
Depreciation of machinery and tools	337 86
Decrease in stock of fuel	1,530 99
Decrease in stock of supplies	81 02
Net outgo for the year	<u>351,025 92</u>
Net loss for the year	<u>\$244,698 84</u>

* This amount was erroneously included by the assessors in the valuation of 1912-13, and is here deducted from the valuation of 1913-14 to rectify the same.

4. Balance Sheet.
End of Fiscal Year January 31, 1914.

ASSETS.		LIABILITIES.	
AVAILABLE ASSETS:		CURRENT LIABILITIES:	
Cash on hand at close of year:		None.	
Tollmen.....	\$200 00		
Office.....	390 06		
	<u>\$590 06</u>		
Inventory of supplies, viz.:			
Fuel.....	\$4,783 97		
Supplies for maintenance.....	4,481 65		
Rents receivable.....			
	<u>\$9,877 68</u>		
Total available assets.....			
CONTINGENT ASSETS:		CONTINGENT LIABILITIES:	\$515 60
City treasury.....	515 60	Appropriations account.....	
FIXED ASSETS:		FIXED LIABILITIES:	
Real estate, land and buildings ¹	2 610,200 00	Capital of the city invested in the ferries, viz.:	
Ferryboats ²	251,624 63	Total expenditures of all	
Machinery, tools, etc.....	3,040 69	kinds for fifty-six years,	
		including interest on ferry	
Total tangible assets.....	\$875,258 60	debt.....	\$12,332,822 18
Avenues, etc., East Boston ⁴	315,815 68	Less total receipts.....	6,991,603 85
Deficiency or loss by operation and maintenance			
of the ferries for fifty-six years to date.....	4,150,659 65		
	<u>\$5,341,733 93</u>		5,341,218 33
			<u>\$5,341,733 93</u>

¹ Original purchase of ferries..... \$276,375 00
 New buildings, drops, slips, etc., cost to date..... 607,323 64
 Land, Lincoln Wharf, cost, 1887..... 5,562 52
 Land, Battery Wharf, cost, 1893..... 10,000 00

\$899,761 16

² Assessors' figures.

³ Total cost to date, per ferry books..... \$743,070 58
 Less boats sold, depreciated or destroyed..... 491,445 95

\$251,624 63

* These expenditures were practically subsidies to the East Boston Ferry Company by the city before the ferries were purchased by the latter and should be added to the deficiency or loss.

⁴ Cost (net) previous to 1870, per ferry books, viz.:
 Expenditures for avenues..... \$250,000 00
 * Expenditures for improvements..... 65,815 68

\$315,815 68

5. Comparison of Receipts, Appropriations and Expenditures for Five Years.

	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
RECEIPTS.					
From foot passengers (tollmen).....	\$61,419 42	\$60,981 61	\$57,930 98	\$57,598 10	\$58,163 78
" foot passes (office sales).....	634 30	638 00	647 30	620 70	677 80
" extra passengers on teams (gatemen).....	1,443 54	1,471 79	1,456 00	1,283 85	1,620 47
" team tickets (office sales).....	547 00	805 50	1,153 50	1,308 50	1,314 50
" strip team tickets (tollmen).....	26,233 00	25,703 50	24,767 00	24,753 50	23,567 00
" teams (gatemen).....	15,325 74	15,484 21	16,652 26	18,960 14	18,843 01
" City Collector for tickets.....	100 00	168 50	58 00		
" free ferries July 4.....	1 00	1 00	1 00	1 00	1 00
Total from rates.....	\$105,704 00	\$106,254 11	\$102,666 04	\$104,525 79	\$104,187 56
From rents.....	405 66	497 34	514 00	492 00	514 00
" old materials sold.....	193 59	157 66	40 37	149 50	74 00
" other sources.....	1,029 05	829 46	868 69	2,391 74	1,551 52
Total ordinary receipts.....	\$107,332 30	\$106,738 57	\$104,089 10	\$107,559 03	\$106,327 08
EXPENDITURES (ORDINARY).					
Office:					
Division engineer's salary (one-half) *.....	\$3,000 00	\$3,000 00	\$2,291 66	\$2,500 00	\$2,500 00
Deputy superintendent's salary.....			3,172 04	3,300 00	3,366 66
General foreman and cashier.....	4,533 33	4,600 00	724 99		117 50
Clerks and cashier.....			1,615 80	4,912 37	5,205 33
Retired veterans' pensions.....					572 45
Retired employees' pension (not veterans).....			227 86	218 72	164 23
Stationery.....	184 76	191 02			
Printing.....	988 02	1,178 15	1,377 16	1,201 81	1,785 94

Telephones.....	213 20	213 25	223 36	248 06	245 44
Advertising.....	72 21	14 80	7 70	32 40	56 80
Car fares.....	53 00	58 00	60 00	74 85	81 00
Postage.....	11 58	25 62	6 00	2 00	6 00
Premiums, surety companies.....	180 00	176 00	176 00	108 00	82 11
Total office expenses.....	\$9,236 10	\$9,456 84	\$9,882 57	\$12,598 21	\$14,183 46
Ferryboats and landings:					
Employees (wages):	150,600 12	158,594 43	166,485 61	170,024 48	174,875 31
Fuel.....	30,629 72	36,741 08	34,438 29	38,588 73	36,437 11
Teaming, weighing coal, etc.....	2,795 07	2,791 89	3,438 22	2,969 12	3,032 21
Supplies, oil, waste †.....	7,061 92	7,338 79	8,141 24	7,528 33	6,250 18
Oils.....	.....	.....	.....	1,422 41	1,508 16
Gas.....	660 56	475 94	449 42	600 10	634 41
Electric light.....	3,412 57	3,705 69	3,911 98	3,929 04	4,090 55
Towing teams by electric motors.....	117 00	123 02	111 32	154 08	112 82
Repairs of boats.....	10,959 95	11,417 71	15,490 51	19,650 80	26,197 95
Repairs of buildings, piers and drops.....	5,798 89	4,450 35	4,366 36	10,185 41	8,882 71
Furnishings.....	227 51	241 70	293 20	527 53	433 12
Other expenditures †.....	601 69	583 19	619 35	838 28	1,089 40
Total from regular annual appropriations.....	\$222,101 10	\$235,920 63	\$247,628 07	\$269,016 52	\$277,727 39
EXPENDITURES FROM SPECIAL APPROPRIATIONS.					
Repairing ferryboat "General Sumner".....	.....	39,500 00	62,589 31	61,870 69	7,532 51
New ferryboat.....	.....	540 00	3,888 05	40,579 44	
Ferry landings, repairs.....	.....	.....	.....	.....	.....
Total expenditures, regular and special.....	\$222,101 10	\$275,960 63	\$314,105 43	\$371,466 65	\$285,259 90
Balances in treasury unexpended.....	40,015 60	124,975 60	110,498 24	8,048 11	515 60

* Remainder paid by Bridge Service.

† Oil purchases included in this item until 1912-13.

‡ Includes repair of coal carts, analysis of coal, expressage and use of towboats.

5. Comparison of Receipts, etc.—*Concluded.*

	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
APPROPRIATIONS.					
Regular annual appropriations	\$230,000 00	\$230,000 00	* \$247,628 07	* \$269,016 52	* \$277,727 39
Transfers from other sources . . . . .	.....	5,920 63			
Special appropriations:					
Repairing ferryboat "General Sumner"	40,000 00	125,000 00	52,000 00		
New ferryboat . . . . .	.....	.....			
Ferry landings, repairs . . . . .	.....	.....			
	\$270,000 00	\$360,920 63	\$299,628 07	\$269,016 52	\$277,727 39

* Part of appropriation for Bridge and Ferry Division applied to Ferry Service.

Comparative Balance Sheets at the Close of Each Year for Five Years.

	January 31, 1910.	January 31, 1911.	January 31, 1912.	January 31, 1913.	January 31, 1914.
<i>Assets.</i>					
Cash, balance on hand.....					\$390 06
Cash, tollmen's capital.....	\$200 00	\$200 00	\$200 00	\$200 00	200 00
Rents receivable.....				22 00	22 00
Fuel and supplies in stock.....	4,730 56	10,830 80	8,440 00	10,877 63	9,265 62
City Treasurer (balance of appropriation).....	40,015 60	124,975 60	110,498 24	8,048 11	515 60
Ferryboats (less depreciation).....	173,880 05	163,987 25	216,769 72	267,685 78	251,624 63
Machinery and tools (less depreciation).....	4,634 50	4,171 05	3,753 95	3,378 55	3,040 69
Real estate, land and buildings (assessors' valuation).....	606,400 00	616,400 00	641,800 00	641,800 00	610,200 00
Total tangible assets.....	\$829,860 71	\$920,564 70	\$981,461 91	\$932,012 07	\$875,258 60
Cost of avenues, etc., East Boston (previous to 1870) ¹	315,815 68	315,815 68	315,815 68	315,815 68	315,815 68
Deficiency of assets (loss).....	3,343,848 65	3,525,261 72	3,677,838 48	3,905,960 81	4,150,659 65
Totals.....	<u>\$4,489,525 04</u>	<u>\$4,761,642 10</u>	<u>\$4,975,116 07</u>	<u>\$5,153,788 56</u>	<u>\$5,341,733 93</u>
<i>Liabilities.</i>					
Capital invested by the City of Boston to date.....	\$4,449,509 44	\$4,636,666 50	\$4,864,617 83	\$5,145,740 45	\$5,341,733 93
Appropriations account (credit balance).....	40,015 60	124,975 60	110,498 24	8,048 11	515 60
Total liabilities.....	<u>\$4,489,525 04</u>	<u>\$4,761,642 10</u>	<u>\$4,975,116 07</u>	<u>\$5,153,788 56</u>	<u>\$5,341,733 93</u>

Details of Capital Invested by the City of Boston.

Total expenditures to date, per ferry books.....	\$10,659,427 16	\$10,953,322 79	\$11,285,363 22	\$11,674,764 87	\$11,977,239 77
Interest on debt for the year (per City Auditor).....	17,935 00	17,935 00	17,935 00	17,215 00	16,155 00
Interest previous years, etc. (net debits per auditor).....	279,148 85	279,148 85	279,148 85	279,148 85	279,148 85
Total expenditures ²	<u>\$10,956,511 01</u>	<u>\$11,250,406 64</u>	<u>\$11,582,447 07</u>	<u>\$11,971,128 72</u>	<u>\$12,272,543 62</u>
Deduct total receipts paid to collector ²	6,507,001 57	6,613,740 14	6,717,829 24	6,825,388 27	6,931,325 29
Excess of expenditures, capital....	<u>\$4,449,509 44</u>	<u>\$4,636,666 50</u>	<u>\$4,864,617 83</u>	<u>\$5,145,740 45</u>	<u>\$5,341,218 33</u>

¹ See footnote 4 under Table 4.² Auditor's figures for total expenditures and receipts are \$60,278.56 more than the above, the difference (capital invested) being the same.

Total Expenditures Upon Ferries Since 1858-59.

Expenditures for avenues, paving, interest, etc., previous to purchase of the ferries by the city	\$444,101 30
Purchase of ferries, April, 1870	276,375 00
Expenditures for ferryboats since April, 1870	743,070 58
Expenditures for new buildings, piers, drops, etc.	607,523 64
Expenditures for tools and fixtures	14,752 46
Expenditures for land from Lincoln's Wharf in 1887	5,562 52
Expenditures for land from Battery Wharf in 1893	10,000 00
Total expenditures on capital account	\$2,101,385 50
Expenditures for repairs of all kinds	1,076,078 49
Expenditures for fuel	1,576,402 67
Expenditures for salaries and wages	5,733,881 82
Expenditures for all other purposes	1,845,073 70
	<u>\$12,332,822 18</u>

Total Receipts From Ferries Since 1858-59.

Receipts from rents, etc., previous to purchase of ferries	\$29,588 56
Receipts from ferry tolls since purchase of ferries	6,696,508 37
Receipts from rents since purchase of ferries	64,670 79
Receipts from sales of ferryboats	149,067 44
Receipts from all other sources, per ferry books, ...	21,623 90
Receipts from all other sources, additional, per auditor	30,734 85
Total receipts from all sources	\$6,992,193 91
Less amount with tollmen as capital, \$200 00	
Less amount on hand with cashier at close of the year	390 06
	<u>590 06</u>
Total receipts per auditor's figures	<u>\$6,991,603 85</u>

REGULAR ANNUAL (ORDINARY) AND SPECIAL APPROPRIATIONS (EXTRAORDINARY) OF THE FERRY SERVICE FOR THE YEAR ENDING JANUARY 31, 1914.

Appropriations (regular) for the year ending January 31, 1914	<u>\$277,727 39</u>
Amount of expenditures for the year	<u>\$277,727 39</u>

SPECIAL APPROPRIATIONS.

Appropriation authorized and issued May 27, 1902, for ferry improvements	\$100,000 00	
Amount expended from May 27, 1902, to January 31, 1914	99,984 40	
Unexpended balance of the appropriation January 31, 1914	\$15 60	
Appropriation authorized January 19, 1910, for transfer from Lamp Division, for repairing ferryboat "General Sumner"	\$40,000 00	
Amount expended from January 19, 1910, to January 31, 1914	39,500 00	
Unexpended balance of this appropriation January 31, 1914	\$500 00	
Appropriation authorized and issued August 22, 1911, for ferry landings repairs	\$52,000 00	
Amount expended from August 22, 1911, to January 31, 1912, ...	\$3,888 05	
Amount expended from February 1, 1912, to January 31, 1913, ...	40,579 44	
Amount expended from February 1, 1913, to January 31, 1914, ...	7,532 51	
	\$52,000 00	

AMOUNTS PAID FROM SPECIAL APPROPRIATION FOR FERRY
LANDING REPAIRS.

Amount paid Samuel Cabot, Inc., fifty gallons "Conserve,"	\$20 00	
Amount paid W. H. Ellis, under contract rebuilding Boston landing, South Ferry:		
15 piles under 45 feet at \$20.50	\$307 50	
23 piles (45 feet to 50 feet) at \$22	506 00	
22 piles (50 feet to 55 feet) at \$23.50	517 00	
80 piles delivered at \$16	1,280 00	
700 feet yellow pine at \$59	41 30	
Drop foundations, 45 per cent done (bid \$1,000)	450 00	
Miscellaneous, 60 per cent done (\$575 bid), ...	345 00	
	\$3,446 80	
Less 15 per cent	517 02	
	2,929 78	
Amount paid S. W. K. Brooks, rebuilding outer half of old wharf at Boston landing, South Ferry:		
Labor and material	\$187 47	
37 men, shoving trusses at 50c.	18 50	
182 men, moving ballast at 50c.	91 00	
Carried forward	\$296 97	\$2,949 78

<i>Brought forward</i>	\$296 97	\$2,949 78
150 men, examinations of tanks, from January 11, 1913, to March 1, 1913, at 50c.	75 00	
		371 97
Amount paid S. W. K. Brooks under contract, building tanks, Boston landing, South Ferry:		
Tank for south drop, complete	\$3,500 00	
Tank for north drop, complete	3,350 00	
	\$6,850 00	
Less previous payments	5,680 12	
		1,169 88
Amount paid W. H. Ellis under contract, rebuilding north pier, Boston landing, South Ferry:		
15 piles under 45 feet at \$20.50	\$307 50	
39 piles (45 feet to 50 feet) at \$22	858 00	
66 piles (50 feet to 55 feet) at \$23.50	1,551 00	
32 piles (55 feet to 60 feet) at \$25	800 00	
12,000 feet B. M. yellow pine at \$59	708 00	
14 chocks at \$1	14 00	
Drop foundations, 90 per cent done (bid \$1,000)	900 00	
Miscellaneous, 90 per cent done (bid \$575),	517 50	
	\$5,656 00	
Less 15 per cent	848 40	
	\$4,807 60	
Less previous payments	2,929 78	
		1,877 82
Amount paid W. H. Ellis under contract, rebuilding north pier, Boston landing, South Ferry:		
15 piles under 45 feet at \$20.50	\$307 50	
39 piles (45 feet to 50 feet) at \$22	858 00	
66 piles (50 feet to 55 feet) at \$23.50	1,551 00	
37 piles (55 feet to 60 feet) at \$25	925 00	
12,090 feet B. M. yellow pine at \$59	713 31	
14 chocks at \$1	14 00	
90 piles covered with canvas at 25c.	22 50	
Drop foundations	1,000 00	
Miscellaneous	575 00	
	\$5,966 31	
Less 5 per cent	298 32	
	\$5,667 99	
Less previous payments	4,807 60	
		860 39
Amount paid W. H. Ellis under contract, rebuilding north pier, Boston landing, South Ferry:		
Amount of contract as per last estimate	\$5,966 31	
Less previous payments	5,667 99	
		298 32
Amount paid General Waterproofing Company, covering three pile tops, Boston landing, North Ferry, middle pier		4 35
		<u>\$7,532 51</u>
Amount paid prior to February 1, 1912	\$3,888 05	
Amount paid from February 1, 1912, to February 1, 1913	40,579 44	
Amount paid from February 1, 1913, to February 1, 1914	7,532 51	
	<u>\$52,000 00</u>	

STATEMENT SHOWING RECEIPTS AT EACH FERRY.

North Ferry.

FROM TOLLMEN.	Foot Passengers.	Team Tickets.	Totals.
East Boston side.....	\$16,214 90	\$8,126 50	\$24,341 40
Boston side.....	17,115 17	5,472 50	22,587 67
	\$33,330 07	\$13,599 00	\$46,929 07

From tollmen \$46,929 07

From gatemen:

For 86,077 foot passengers at 1

cent \$860 77

For cash fares for teams 9,187 29

10,048 06

Total at North Ferry \$56,977 13

South Ferry.

FROM TOLLMEN.	Foot Passengers.	Team Tickets.	Totals.
East Boston side.....	\$12,055 73	\$3,959 50	\$16,015 23
Boston side.....	12,777 98	6,008 50	18,786 48
	\$24,833 71	\$9,968 00	\$34,801 71

From tollmen \$34,801 71

From gatemen:

For 75,970 foot passengers at 1

cent \$759 70

For cash fares for teams 9,655 72

10,415 42

Total at South Ferry \$45,217 13

North and South Ferries as above \$102,194 26

Tickets paid for at ferry office 1,992 30

Received in lieu of free ferries, July 4, 1913 1 00

\$104,187 56

Rents for the year 514 00

Carried forward \$104,701 56

<i>Brought forward</i>	\$104,701 56
Sale of old material	74 00
Commissions on public telephone	51 52
Head-house privileges	600 00
Revenue applied to appropriation, damages recovered	900 00
Total cash receipts for the year	<u>\$106,327 08</u>

STATEMENT OF TRAVEL ON THE FERRIES FROM FEBRUARY
1, 1913, TO JANUARY 31, 1914, INCLUSIVE.

	North Ferry.	South Ferry.
Foot passengers at 1 cent each	3,419,084	2,559,341
Foot passengers by ticket	39,250	26,832
Foot passengers free	1,396	1,113
Total foot	<u>3,459,730</u>	<u>2,587,286</u>
One-horse teams and pleasure carriages	350,218	301,483
Two-horse teams	128,232	110,889
Three-horse teams	5,207	2,525
Four-horse teams	2,008	2,570
Two-horse pleasure carriages and hacks	36,763	27,097
Handcarts, etc.	1,812	850
Dragwheels	1	—
Free teams	8,171	4,783
	<u>532,412</u>	<u>450,197</u>
Total cash foot passengers		6,044,507
Total free foot passengers		2,509
Total foot passengers carried		<u>6,047,016</u>
Total cash teams		969,655
Total free teams		12,954
Total teams carried		<u>982,609</u>

TOTAL TRAVEL ON BOTH FERRIES FROM FEBRUARY 1,
1909, TO JANUARY 31, 1914.

	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
One-horse teams.....	625,723	625,081	635,792	658,255	651,701
Two-horse teams.....	245,131	241,896	236,600	249,052	239,121
Three-horse teams.....	11,929	11,040	10,357	9,697	7,732
Four-horse teams.....	9,257	9,498	7,218	5,838	4,578
Two-horse carriages and hacks....	30,667	40,703	51,637	67,094	63,860
Two-cent tolls for handcarts, etc....	5,934	6,068	4,329	5,519	2,662
Dragwheels, etc.....	12	5	11	6	1
Paid teams at both ferries.....	934,653	934,291	946,144	995,101	969,655
Free teams at both ferries.....	4,722	5,386	8,134	14,541	12,954
Total teams at both ferries.....	939,375	939,677	954,278	1,009,642	982,609
Foot passengers, paid.....	6,352,461	6,313,696	6,007,367	5,950,153	6,044,507
Foot passengers, free.....	960	3,827	3,554	2,551	2,509
Total foot passengers.....	6,353,421	6,317,523	6,010,921	5,952,704	6,047,016

APPENDIX C.

REPORT OF DIVISION ENGINEER OF THE HIGHWAY DIVISION.

BOSTON, February 2, 1914.

MR. L. K. ROURKE,

Commissioner of Public Works:

DEAR SIR,— I submit herewith a report of the income, expenditures and operations of the Highway Division of the Public Works Department for the year 1913.

The maintenance expenditures of the division for the year, from February 1, 1913, to January 31, 1914, was as follows:

Paving Service	\$1,392,468 22
Sanitary Service	925,318 56
Street Cleaning and Water Service	753,457 39
Lighting Service	795,880 53
	\$3,867,124 70

The permanent pavements laid during the year were confined principally to wood blocks and bitulithic. Warren avenue in the South End; Marvin, Ruggles and Vernon streets in Roxbury, and the completion of the contract in Washington street, Dorchester, comprise the wood block areas. Bitulithic pavement was laid in Washington street, Brighton, and Centre and South streets, West Roxbury.

The use of bituminous binders in the maintenance of the macadam streets by the division forces has been continued, about all the streets resurfaced being treated with tar or asphalt. The resurfacing operations of the Paving Service used about 460,000 gallons of asphalt and tar.

The activity in the construction of assessment streets is shown by the awarding of 105 contracts during the year. Of this number 80 were completed, together with

27 carried over from last year, making 107 contracts completed in 1913, the balance, 25 contracts, carried over to 1914 for completion.

The contract with the Boston Development and Sanitary Company became operative in March, the Sanitary Service delivering its collections of garbage, ashes and refuse at the several water front stations and Southampton street and Massachusetts avenue dumps. The opening of these stations has eliminated the inland dumps which means long hauls for the material collected in the outskirts of the district and a consequent increase in the cost of the Sanitary Service. To facilitate the delivery of ashes, etc., to the stations two auto trucks were purchased, the results thus far being very satisfactory. New horse-drawn carts of special design have been added to the rolling stock which can be used in collecting either garbage or ashes.

The street cleaning rolling stock has been reinforced by the addition of two new pressure flushers and a number of new horses to replace some worn-out stock. Experiments have been made in the line of dustless sweeping by the use of calcium chloride and also spraying the broom, the results obtained not being entirely satisfactory. In the oiling of streets about 1,500,000 gallons of oil were used for dust suppression, covering an area of about 7,000,000 square yards. Oils with asphaltic base were principally used although a considerable area was treated with light or non-asphaltic oils, the latter being applied under pressure by the city gasoline automobile spraying machine, capacity of tank 1,000 gallons.

Street lamps of the various types have been installed on the new streets constructed by the division; also on private streets that have been opened and built upon.

The installation of arc and tungsten lamps in the city proper in place of gas lamps has been completed. Magnetite arc lamps have been substituted for inclosed arc lamps in the Charlestown district, giving that section the same service as received in the other sections of the city.

There is a growing demand for additional lighting on some of the business streets and thoroughfares which should be attended to when funds are available.

Respectfully,

JAMES H. SULLIVAN,
Division Engineer.

FINANCIAL STATEMENT, HIGHWAY DIVISION.

Receipts.

Appropriation	\$3,670,000 00
Transfer from Bridge and Ferry Division	30,000 00
Transfer from Printing Department	25,000 00
Transfer from Reserve Fund	25,000 00
Transfer from City Debt Requirements, Interest, Revenue	20,000 00
	98,805 44

PAVING SERVICE \$22,692 59

Inspectors' services	\$5,071 50
Labor and materials furnished	10,397 97
Materials sold	1,490 19
Care and feed of horses	4,083 64
Use of roller	7 00
Damage to automobile	500 00
Removing snow	500 00
Gasolene furnished	25 67
Refund of overpayment on crushed stone	616 62

SANITARY SERVICE 75,199 43

Sale of tickets for removal of ashes, garbage, etc.	\$60,530 05
Sale of tow boat "Cormorant"	8,287 42
Sale of old material	358 37
Horse killed on account of glanders	50 00
Refund on overpayment on express charge	47
Work done and materials furnished other divisions and departments	5,335 37
Care and feed of horses	628 00
Dumping boat service	9 75

Carried forward \$3,868,805 44

<i>Brought forward</i>		\$3,868,805 44
STREET CLEANING AND OILING SERVICE	\$913 42	
Removing street dirt,	\$833 00	
Horse killed on account of glanders,	50 00	
Labor and materials furnished	30 42	
		\$3,868,805 44
Transferred to Central Office appropriation		159 50
		\$3,868,645 94
<i>Expenditures.</i>		
Lighting Service	\$795,880 53	
Paving Service	1,392,468 22	
Sanitary Service	925,318 56	
Street Cleaning and Oiling Service,	753,457 39	
		3,867,124 70
Balance January 31, 1914		
		\$1,521 24

SPECIAL APPROPRIATIONS.

Street Lighting Equipment.

Balance February 1, 1913	\$296,411 48
Expenditures from February 1, 1913, to January 31, 1914	000,000 00
	\$296,411 48

Highways, Making of.

Expenditures from February 1, 1913, to January 31, 1914	\$265,583 18
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Old Colony Avenue, Construction of.

Balance February 1, 1913	\$16,053 51
Expenditures from February 1, 1913, to January 31, 1914	1,485 65
Balance January 31, 1914	\$14,567 86

*Tunnel Under Railroad Tracks Between Boylston and Green Streets, Jamaica Plain.**

Balance February 1, 1913	\$18,687 18
Amount paid by New York, New Haven & Hartford Railroad	528 55
	\$19,215 73

<i>Carried forward</i>	\$19,215 73
------------------------	-------------

* Lawndale terrace laid out under chapter 393 of the Acts of 1906.

<i>Brought forward</i>	\$19,215 73
Expenditures from February 1, 1913, to January 31, 1914	12,227 55
Balance January 31, 1914	<u>\$6,988 18</u>

*Arlington Street Extension.**

Expenditures from February 1, 1913, to January 31, 1914	<u>\$318 33</u>
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*Harvard Avenue, Brighton.**

Expenditures from February 1, 1913, to January 31, 1914	<u>\$645 68</u>
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*Norfolk Street Widening.**

Expenditures from February 1, 1913, to January 31, 1914	<u>\$4,946 60</u>
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*Pleasant Street Widening.**

Expenditures from February 1, 1913, to January 31, 1914	<u>\$26,415 58</u>
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Thacher Street Extension.

Expenditures from February 1, 1913, to January 31, 1914	<u>\$180 67</u>
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*Union Park Street.**

Expenditures from February 1, 1913, to January 31, 1914	<u>\$8,852 47</u>
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Everett Street, Brighton, Property.

Balance February 1, 1913	\$23,000 00
Expenditures from February 1, 1913, to January 31, 1914	00,000 00
Balance February 1, 1914	<u>\$23,000 00</u>

Land and Buildings, Refuse Station.

Balance February 1, 1913	\$61,110 85
Expenditures from February 1, 1913, to January 31, 1914	45,527 53
Balance February 1, 1914	<u>\$15,583 32</u>

Refuse Destructor Site, Spectacle Island.

Balance February 1, 1913	\$15,000 00
Expenditures from February 1, 1913, to January 31, 1914	00,000 00
Balance February 1, 1914	<u>\$15,000 00</u>

* Laid out under chapter 393 of the Acts of 1906.

HIGHWAY DIVISION — LIGHTING SERVICE.

FINANCIAL STATEMENT.

*Expenditures, February 1, 1913, to January 31, 1914.**Electric Lighting:**Arc.*

Edison Electric Illuminating Company	\$432,163 09	
Charlestown Gas and Electric Company	27,131 68	
		\$459,294 77

Incandescent.

Edison Electric Illuminating Company	\$53,847 87	
Charlestown Gas and Electric Company	22 25	
		53,870 12

Gas Lighting:

Boston Consolidated Gas Company	\$4,391 54	
Charlestown Gas and Electric Company	133 93	
East Boston Gas Company	171 79	
Rising Sun Street Lighting Company	258,188 84	
City lighting and care	1,943 06	
		264,829 16

Salaries and Wages:

Division Engineer (part of)	\$1,250 00	
Supervisor	2,044 45	
Inspectors	4,275 75	
Messengers and watchmen	3,073 77	
		10,643 97

Auto Expenses:

Gasolene, oil, etc.	\$150 79	
Storage	155 33	
Tubes and shoes, new and repairs, ...	192 61	
Supplies	170 85	
Registration	10 00	
Repairs (old car)	497 12	
Buick car (new)	648 00	
		\$1,824 70
Wages of chauffeur	1,113 00	
		2,937 70

<i>Carried forward</i>		\$791,575 75
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<i>Brought forward</i>		\$791,575 72
<i>Construction:</i>		
Underground work	\$2,650 11	
Wrought-iron work	122 50	
Electric changes	85 58	
Lamp-posts	3 70	
		2,861 89
<i>Horsekeeping:</i>		
Horsekeeping, shoeing, repairs, etc.		920 86
<i>Printing, etc.:</i>		
Printing	\$99 28	
Postage	40 00	
Stationery and periodicals	62 55	
		201 83
<i>Miscellaneous:</i>		
Traveling expenses	\$237 45	
Telephone rentals, etc.	40 53	
Atlas	31 50	
Signs and numbers	2 00	
Tools, etc.	5 05	
Testing lamps	90	
Building repairs	2 80	
		320 23
 Total		<u>\$795,880 53</u>

The following is a statement of the work done during the year under the supervision of the Supervisor of Street Lighting.

The numerous petitions and applications for new lamps received from citizens and from officials, also complaints in relation to this service, have been investigated. All streets in the underground district prescribed for the calendar year 1913 have been inspected and the necessary changes and additions made.

Magnetite arc lamps have been substituted for the inclosed arc lamps in the Charlestown district, and all of the city proper district is now lighted electrically.

Arc lamps were provided for skating during the season at Franklin Field, Wood Island, Jamaica Pond, North Brighton, Savin Hill and Alford Street Playgrounds.

The number of miles of streets and ways lighted by this service is as follows:

	Miles.
Public streets and alleys	572.85
Public footways	1.04
Park roads, footways and private streets and alleys approximately	300.00
	873.89

During the year 15,237 defects in the gas lamps were reported by the inspectors, and the following defects were reported by the police: Arc lamps, 9,429; incandescent lamps, 1,144, and gas lamps, 766.

LAMPS INSTALLED.

Magnetite arc lamps	709	
Gilbert arc lamps	2	
Tungsten lamps	1,362	
Single mantle gas lamps	116	
Inverted mantle gas lamps	2	
Single mantle gas lamps relighted	39	
Fire alarm gas lamps	1	
		2,231

LAMPS DISCONTINUED.

Gilbert arc lamps	282	
Magnetite arc lamps	36	
Flame arc lamps	1	
Tungsten lamps	18	
Single mantle gas lamps	1,475	
Inverted mantle gas lamps	56	
Triple mantle gas lamps	1	
Fire alarm gas lamps	125	
		1,994
Net increase		237

The following table shows the work of setting, repairing and altering lamp-posts, brackets, services, etc.:

	Set for Lamps.	Set in Place of Broken Posts.	Shifted to New Location.	Straight- ened.	Reset to Line and Grade.	Removed.	Repaired.	Laid.	Relaid.	Recon- nected.	Cleared.	Exten- sions Removed.	Exten- sions Set.	Set in Place of Brackets.	Shades.
Gas posts.....	71	20	14	39	180	168	21					56	2	1	10
Are posts.....	424		74	8	26	23									35
Tungsten posts....	445	1	3	2	4	8								5	8
Gas brackets.....						109									
Are fixtures.....	6						1								
Tungsten fixtures..	794		1			21	2								
Fire alarm posts:															
Gas.....	39														
Tungsten.....	122														
Fire alarm tungsten bracket.	1														
Services.....						343	268	122	27	2	213				

The following table shows the number of lamps of the various types in use on January 1, 1914, as compared with the number in use January 1, 1913:

	January, 1914.	January, 1913.	Increase or Decrease.
Single mantle gas.....	9,844	11,202	—1,358
Double mantle gas.....	95	95	.....
Triple mantle gas.....	17	18	—1
Inverted mantle gas.....	158	212	—54
Fire alarm gas.....	157	243	—86
Magnetite arc.....	4,698	4,025	+673
Gilbert arc.....	5	285	—280
Flame arc.....	30	31	—1
Tungsten incandescent.....	3,477	2,118	+1,359
Carbon incandescent.....	15	15	.....
Totals	18,496	18,259	+237

STREET LAMP OUTAGE.

Rebates for lamps not lighted on schedule time or out before the proper time have been received on the various monthly bills, as follows:

DATE.	Incandescent.	Gas.	Arc.
February, 1913.....	\$6 92	\$5 53	\$361 19
March.....	6 44	16 40	388 35
April.....	3 30	4 59	130 06
May.....	4 36	2 91	124 48
June.....	1 12	2 91	110 22
July.....	4 19	3 51	60 39
August.....	4 67	3 01	115 33
September.....	4 84	1 55	204 55
October.....	10 23	4 21	271 18
November.....	9 23	5 11	351 34
December.....	7 26	8 08	337 61
January, 1914.....			
Totals.....	\$62 56	\$57 81	\$2,464 70

GAS LIGHTING.

There are in use 9,844 single mantle gas lamps, 95 double mantle lamps, 17 triple mantle lamps, 158 inverted mantle lamps and 157 open flame fire alarm signal lamps.

The city furnishes and provides for the setting of the lamp-posts, has service pipes laid from the gas mains

to the top of the posts, maintains all such pipes and posts in good condition and repair, contracts for gas, lanterns, burners, other necessary equipment and labor for lighting and care, except for the inverted lamps, in which case the city furnishes the labor and equipment.

The Lighting Service provides for the gas, lighting and care of the fire alarm signal lamps, and the Fire Department that of repairs, setting of posts and lanterns.

Gas Lamps.

LIGHTING COMPANY.	Gas District.	Number of Lamps.	Type of Lamp.	Rated Candle Power.	Gas Consumed per Lamp per Hour.	Hours of Burning per Annum.	Cost of Gas per M.	Cost of Gas per Lamp per Annum.	Cost per Lamp for Lighting, Care and Repair per Annum.	Total Cost per Lamp.
Rising Sun Street Lighting Company.	Boston Consolidated.	8,830	Single mantle.	60	3 feet.	4,000	\$0 78	.....	.....	\$23 60
		12	Triple mantle.	180	9 feet.	4,000	78	.....	.....	47 60
		95	Double mantle.	120	6 feet.	4,000	78	.....	.....	35 20
		128	Open flame.	.....	4 feet.	4,000	78	\$12 48	\$10 50	22 98
Rising Sun Street Lighting Company.	Charlestown.....	510	Single mantle.	60	3 feet.	4,000	85	.....	.....	23 60
		16	Open flame.	.....	3 feet.	4,000	85	9 60	10 50	20 10
Rising Sun Street Lighting Company.	East Boston.....	504	Single mantle.	60	3 feet.	4,000	85	.....	.....	23 60
		5	Triple mantle.	180	9 feet.	4,000	85	.....	.....	47 60
		13	Open flame.	.....	4 feet.	4,000	85	13 60	10 50	24 10

ELECTRIC LIGHTING.

There are in use 4,698 magnetite arc lamps, 30 flame arc lamps, 5 Gilbert arc lamps, 2,379 50-watt, 1,086 75-watt, 10 100-watt and 2 125-watt tungsten lamps and 15 carbon incandescent lamps.

The electric companies provide and set the lamp-posts, furnish lamps, overhead wires, underground cables and connections and all other necessary equipment and maintain them in good condition and repair.

The lighting rates for the electric lamps are in accordance with the following table:

LAMP.	Fixed Cost per Lamp Year.	Running Costs per Lamp Hour.
50-watt tungsten lamp.....	\$10 80	\$0 0025
75-watt tungsten lamp.....	12 00	0030
100-watt tungsten lamp.....	14 00	0040
125-watt tungsten lamp.....	18 00	0050
500-watt Gilbert arc lamp.....	36 00	0160
500-watt magnetite arc lamp.....	42 00	0175
500-watt flame arc lamp.....	42 00	0320

A discount of 5 per cent is made on the above rates for lamps in all sections of the city excepting the Hyde Park district, where the discount is 10 per cent.

A deduction at the rate of 1 cent per hour per tungsten lamp and 5 cents per hour per arc lamp is made for all outages.

HIGHWAY DIVISION (PAVING SERVICE).

The following is a description of the most important work done during the year under the supervision of the Chief Engineer.

GRANITE BLOCK PAVING.

Fulton street, from Richmond street to Lewis street, is about 525 feet in length. The contract for repaving this street on a new Portland cement concrete base with pitch joints was awarded to the Boston Paving Company, September 30, 1913. The contractor also reset the edgestone and relaid the brick sidewalks. The city furnished the new straight edgestone, corners and flagging at the South End Paving Yard and some second-hand flagging was hauled from Warren avenue. The city furnished the circular edgestone, sidewalk brick and second-hand granite paving blocks on the line of the work. The contractor removed the old paving blocks, did the excavating and furnished all other materials necessary to do the work.

Providence street, from 70 feet east of Church street to Berkeley street. (See "Assessment Streets.")

Sleeper street, from Congress street about 650 feet northerly. The contract for furnishing and laying a special cut granite block pavement on a Portland cement concrete base with pitch joints was awarded to John E. Quinn June 3, 1913. It is a 40-foot street with a 5-foot sidewalk on the easterly side and a 3-foot sidewalk on the westerly side. The contractor reset the edgestone and relaid the brick sidewalks. The city furnished the straight edgestone at the South End Paving Yard and the sidewalk brick on the line of the work. The contractor did the excavating and hauled the old paving blocks to the Massachusetts avenue lot. The special cut granite blocks and all other materials necessary to do the work was furnished by the contractor.

Washington street (West Roxbury), at and near Hyde Park avenue and Tower street, about 120 feet in length, was paved with special granite blocks, 5 inches in depth, on a 6-inch Portland cement concrete base, with pitch and pebble joints. This work was done under contract by James Doherty who also did the excavating and regulating. The circular edgestone was furnished by the city on the line of the work. The contractor furnished all the other materials. The old gutter blocks were hauled to the Child Street Paving Yard by the contractor. The track area was paved by the Boston Elevated Railway Company with second-hand blocks on a gravel bed, with cement grout joints. The former surface was macadam.

West First street, from A street to the New England Railroad crossing, about 420 feet in length, was repaved with special cut granite blocks, on a 6-inch Portland cement concrete base and sand bed, by John E. Quinn, under his contract dated May 7, 1913. The contractor reset the edgestone, laid the crosswalks and relaid the brick sidewalks. The city furnished the straight edgestone at the South End Paving Yard and the circular edgestone and sidewalk brick on the line of the work. The contractor did the excavating and furnished the special blocks and flagging and all other materials required to do the work.

ASPHALT PAVING.

Hayward place, from Washington street to Harrison avenue, about 268 feet in length, was resurfaced by the Boston Paving Company under a five (5) year maintenance guaranty, with $1\frac{1}{2}$ inches of Acme asphalt wearing surface and $1\frac{1}{2}$ inches bituminous concrete binder; 392 square yards of the old concrete base next to Harrison avenue was removed on account of settlement and replaced by new Portland cement concrete 6 inches in depth. The remainder of the concrete base was found in good condition and was allowed to remain. The contractor furnished the necessary materials and labor.

Lovering place, from Washington street to Harrison avenue. (See "Assessment Streets.")

Union Park street, from Washington street to Harrison avenue. (See "Assessment Streets.")

WOOD BLOCK PAVING.

Beacon street, from Massachusetts avenue to Raleigh street, about 1,527 feet in length, was patched with new wood block under a one (1) year maintenance guaranty, on the existing concrete base, with gravel bed and joints, by the Central Construction Company, who also did a small amount of regulating. All materials were furnished by the contractor.

Church street, from Providence street to Boylston street. (See "Assessment Streets.")

Dorchester avenue, from Ralston street to 140 feet southerly, was paved with wood blocks on a Portland cement concrete base, with sand bed and sand joints, under a five (5) year maintenance guaranty, by Coleman Brothers, under their contract dated August 9, 1913. The edgestone was reset, crosswalk laid and brick sidewalks relaid. The existing paving in and between the car tracks was not disturbed. The city furnished the flagging at the South Boston Paving Yard and the sidewalk brick on the line of the work. The contractor did the excavating and furnished all other materials required to do the work. The former surface of the street was granite block on a gravel base.

Exchange street, from State street to Dock square, 337 feet in length, was paved in part with wood blocks on a Portland

cement concrete base, sand bed, expansion and sand joints, under a five (5) year guaranty, by the Central Construction Company, under its contract dated November 10, 1913, and in part with granite blocks on a concrete base, pitch and pebble joints. Under an order for extra work the original contract was extended from 174 feet north of State street to Dock square, about 163 feet in length. On the extended work wood blocks were laid with lath joints to within 25 feet of Dock square, which was repaved with the old granite blocks with pitch joints on a concrete base. On account of an existing injunction of the court, the contractor was ordered to remove the wood blocks for a distance of 160 feet from State street and to replace them with granite block and flagging with pitch and pebble joints. The city furnished the straight edgestone and flagging at the South End Paving Yard and the paving blocks and sidewalk brick on the line of the work. The contractor regulated the edgestone, did the excavating and furnished all other materials to do the work. The former surface of the street was granite block.

Marvin street, from Washington street to Shawmut avenue, about 264 feet in length; *Vernon street*, from Washington street to Shawmut avenue, about 295 feet in length, and *Ruggles street*, from Washington street to Shawmut avenue, about 459 feet in length, were paved with wooden blocks on a 6-inch Portland cement concrete base, sand bed and joints, under a five (5) year maintenance guaranty, by the Boston Paving Company, under their contract dated July 1, 1913. The contractors reset the edgestone and furnished and laid the artificial stone sidewalks, under a five (5) year maintenance guaranty. In connection with this work there was considerable edgestone reset, brick sidewalks relaid and block paving, gravel joints, repaved on Shawmut avenue at the approaches to the above streets. The city furnished the straight edgestone at the South End Paving Yard and circular edgestone on the line of the work. All other materials necessary to do the work were furnished by the contractor, who also did the excavating and hauled the old paving blocks, flagging, edgestone and sidewalk brick to the Dimock street lot. The former surfaces were macadam.

Pleasant street, from Eliot street to Washington street. (See "Assessment Streets.")

Warren avenue, from Berkeley street to Columbus square, about 2,044 feet in length, was paved with wood blocks on a 6-inch Portland cement concrete base, sand bed, expansion and sand joints, under a five (5) year maintenance guaranty, by the Boston Paving Company, under its contract dated July 1, 1913. The contractors reset the edgestone, laid the crosswalks and relaid most of the brick sidewalks. The city furnished the circular edgestone and sidewalk brick on the line of the work and the flagging at the South End Paving Yard. The contractors did the excavating and hauled the surplus old paving

blocks and flagging to the Massachusetts avenue lot, and furnished all other materials required in doing the work. The former surface of the street was macadam.

Washington street (Dorchester), from Blue Hill avenue to Talbot avenue and the extension across Codman square is about 7,645 feet in length. The roadway was paved during the summer of 1912 from Blue Hill avenue across Bowdoin street. Work was resumed in the spring of 1913 by the contractor, William J. Barry, and finished before the close of the season. The roadway is paved with wood blocks on a 6-inch concrete base and the sidewalks with artificial stone, both under a five (5) year maintenance guaranty. The contractor did the excavating and regulating and hauled the surplus excavated material to Morton street, between Harvard street and Canterbury street, where it was spread for filling. Old gutter blocks were hauled by the contractor to the Massachusetts avenue lot and were also used for gutter paving on various streets under construction. The former surface of this street was macadam.

BITULITHIC PAVING.

Centre and South streets, from Green street to Keyes street, about 2,742 feet in length, were paved on each side of and between street car tracks with 2 inches of bitulithic pavement on a 6-inch Portland cement concrete base, under a five (5) year maintenance guaranty, by the Warren Brothers Company. Wood block brows, 6 inches in width, were laid on a 6-inch Portland cement concrete base on each side of the car tracks. The crosswalk at side streets are the existing flagging laid on a 6-inch Portland cement concrete base with pitch joints; artificial stone sidewalks were laid and the space between the rails was paved with second-hand granite blocks on a gravel bed with cement grout joints, by the Boston Elevated Railway Company. The contractor did the excavating and regulating. The city furnished the necessary new straight edgestone at the South End Paving Yard and the new blocks and flagging, except what were delivered to various contractors for use on other streets, were hauled by the contractor to the Carolina street playground. All other material was furnished by the contractor. The former surface was macadam.

Norfolk street, from Washington street to the New York, New Haven & Hartford Railroad bridge. (See "Assessment Streets.")

Spring street, from Allen street to Poplar street, about 203 feet in length, was paved with a bitulithic pavement on a Portland cement concrete base by Warren Brothers Company, under a five (5) year maintenance guaranty. The contractor also reset the edgestone and relaid the brick sidewalks. The city furnished the straight edgestone at the South End Paving Yard and the circular edgestone and sidewalk brick on the line of the work. The contractor furnished all other materials

necessary to do the work, and also did the excavating and hauled the old paving blocks, etc., to the Massachusetts avenue lot. The former surface of the street was granite blocks on a gravel base.

Washington street (Brighton), from Cambridge street across Market street, about 1,146 feet in length, was paved with 2 inches of bitulithic pavement on a 6-inch Portland cement concrete base, under a five (5) year maintenance guaranty, by the Warren Brothers Company, under its contract dated May 26, 1913. The contractors reset the edgestone, laid the crosswalks, furnished and laid the wooden block brows along the car tracks and furnished and laid the artificial stone sidewalk under a five (5) year maintenance guaranty. The city furnished the straight edgestone and flagging at the South End Paving Yard and the circular edgestone on the line of the work. The contractors furnished the other materials necessary to do the work and hauled the old materials to the Brighton Paving Yard. The former surface of the street was macadam.

BRICK BLOCK PAVING.

Hancock and Bowdoin streets, from Winter street to Hancock street. (See "Assessment Streets.")

ASSESSMENT STREETS.

The following streets have been constructed or are in the process of construction under the provisions of chapter 393 of the Acts of 1906, and the acts in amendment or in addition thereto:

Appian way, from Franklin street to Raymond street, is about 426 feet in length. The contract for constructing the surface of this street was awarded to John J. Lane September 9, 1913. Work was begun September 12, 1913, and completed November 15, 1913. It is a 25-foot street with a 6-inch tar macadam roadway, edgestones were set, 2½-foot block gutters, and flagging crosswalks were laid. The sidewalks, 4½ feet wide, were laid with artificial stone, under a five (5) year maintenance guaranty. The straight edgestone and flagging were furnished by the city at the South End Paving Yard, the granite blocks at the Brighton Yard and the circular edgestone on the line of the work. The contractor did the excavating and furnished all other materials required in doing the work.

Armington street, from Webster street to Islington street, is about 570 feet in length, and *Islington street*, from Armington street to Brighton avenue, is about 263 feet in length. The contract for constructing the surfaces of these streets was awarded to A. J. & G. H. McMurtry October 24, 1913. Work was begun October 31, 1913, and suspended December 2, 1913. These streets, as constructed, are 29.75 feet in width, with a 6-inch tar macadam roadway, granite edgestone and flagging

crosswalks. The sidewalks are 5 feet wide, laid with artificial stone under a five (5) year maintenance guaranty. The straight edgestone and flagging was furnished by the city at the South End Paving Yard, Albany street, the granite paving blocks at the Massachusetts avenue lot, and the circular edgestone on the line of the work. The contractor did the excavating and furnished all other materials required in doing the work. These streets are completed with the exception of the sidewalks. The usual granite block gutters were omitted and tar macadam was substituted. Work will be resumed early in the spring.

Audubon road, from Ivy street to Mountfort street, is about 346 feet in length. The contract for constructing the surface of this street was awarded to the Boston Paving Company October 29, 1913. Work was begun November 19, 1913, and completed December 20, 1913. It is a 50-foot street with a 6-inch asphalt macadam roadway. Edgestone was set on the westerly side of the street and 3-foot granite block gutters were laid. An artificial stone sidewalk, 8 feet wide, was laid on the westerly side of street, under a five (5) year maintenance guaranty. The easterly sidewalk, which had been built previous to the present construction, was not disturbed. The straight edgestone, corners and flagging were furnished by the city at the South End Paving Yard, Albany street, the granite paving blocks at the Massachusetts avenue lot and the circular edgestone on the line of the work. The contractor did the excavating and furnished all other materials required in doing the work. Flagging crosswalks were also laid.

Barrymore street, from Blue Hill avenue to Harvard street, is about 271 feet in length. The contract for constructing the surface of this street was awarded to the Fred S. & A. D. Gore Corporation October 2, 1912. Work was begun March 17, 1913, and completed July 15, 1913. It is a 40-foot street with a 6-inch macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone and flagging was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty. The surplus excavation was hauled to Morton street.

Bentham road, from Draper street to Robinson avenue, is about 270 feet in length. The contract for constructing the surface of this street was awarded to James Doherty December 5, 1912. Work was begun May 3, 1913, and completed June 4, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks with loam space. The sidewalk on the east side is 7 feet in width, with an artificial stone walk 4 feet in width on both sides and a loam space. The straight edgestone, flagging and paving blocks were fur-

nished by the city and hauled by the contractor; the circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The new artificial stone sidewalks were laid under a five (5) year maintenance guaranty.

Brainerd road, from Harvard avenue to Warren street, is about 1,816 feet in length. The contract for constructing the surface of this street was awarded to James Doherty November 25, 1912. Work was begun March 15, 1913, and completed June 21, 1913. The street varies in width from 45 to 50 feet, with a 6-inch tar macadam roadway. Edgestone was set, 3-foot granite block gutters laid and flagging crosswalks laid. The sidewalk, 8 foot in width, was laid with artificial stone, under a five (5) year maintenance guaranty. The flagging and part of the straight edgestone was furnished by the city at the South End Paving Yard, Albany street, the remainder of the straight edgestone and the circular edgestone were delivered on the line of the work by the city and the granite paving blocks at the Brighton Paving Yard. The contractor did the excavating and furnished all other materials required in doing the work.

Brookview street, from Blue Hill avenue to Harvard street, is about 533 feet in length. The contract for constructing the surface of the street was awarded to James Doherty November 25, 1912. Work was begun May 19, 1913, and completed July 17, 1913. It is a 50-foot street, with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 8-foot sidewalks, consisting of a 5-foot artificial stone sidewalk and a loam space. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty. The surplus material was hauled to Morton street and to Dumas street.

Bynner street, from South Huntington avenue to Day street, is about 716 feet in length. The contract for constructing the surface of this street was awarded to J. C. Coleman & Sons Company May 6, 1913. Work was begun July 9, 1913, and completed September 27, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestones and artificial stone sidewalks, 7 feet in width, laid under a five (5) year maintenance guaranty. The straight edgestone, corners and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The paving blocks were furnished by the city, a part at the Massachusetts avenue lot and a part at Hyde square, and hauled by the contractor. All other materials were furnished by the contractor.

Calumet street, from Parker Hill avenue to Hillside street,

is about 1,201 feet in length. The contract for constructing the surface of this street was awarded to James Doherty June 3, 1913. Work was begun August 26, 1913, and completed November 8, 1913. It is a 40-foot street with a 6-inch tar macadam roadway. Edgestone was set and 3-foot granite block gutters and flagging crosswalks were laid. The sidewalk, 7 feet in width, was laid with artificial stone, with a five (5) year maintenance guaranty. The straight edgestone, corners and flagging were furnished by the city at the South End Paving Yard, Albany street; the granite paving blocks were furnished by the city, some on the line of the work, some from Mountfort street and some from the South End Paving Yard, Albany street. The circular edgestone was furnished on the line of the work. The contractor put in crushed stone foundation under some of the edgestone and a ground water-drain to take care of the ground water which was very troublesome on this street. He also did the excavating and furnished all other materials necessary to do the work.

Church street, from Providence street to Boylston street, about 150 feet in length, was repaved with wood block on a concrete base, with sand bed and joints by Coleman Brothers, under their contract dated August 9, 1913. Work was begun August 12, 1913, and completed September 11, 1913. On account of the change in grade of Providence street it was necessary to raise the car tracks and pavement on this street. The contractor removed the old pavement and relaid the new one with new blocks on a new base. He also laid 7-foot artificial stone sidewalks. All the materials required to do the work were furnished by the contractor. The wood block pavement and artificial stone sidewalk are both laid under a five (5) year maintenance guaranty.

Clement avenue, from Stratford street to Park street, is about 437 feet in length. The contract for constructing the surface of this street was awarded to Thomas F. Minton April 28, 1913. Work was begun May 5, 1913, and completed July 7, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 7 feet in width, laid under a five (5) year maintenance guaranty. The straight edgestone, corners and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work.

The granite blocks were furnished by the city and hauled by the contractor, part from Massachusetts avenue lot and part from Washington street, Dorchester. All other materials were furnished by the contractor.

Cliftondale street, from Kittredge street to Norfolk street, is about 951 feet in length. The contract for constructing the surface of this street was awarded to Thomas F. Minton June 9, 1913. Work was begun July 16, 1913, and completed Decem-

ber 31, 1913. It is a 40-foot street with a 6-inch Bermudez asphalt roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 7 feet in width, laid under a five (5) year maintenance guaranty (except 37 feet 2 inches from Sheffield road and 10 feet 1 inch from Montclair avenue). Corners and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The granite blocks were furnished by the city and hauled by the contractor, part from Massachusetts avenue lot and part from Centre and South streets. All other materials were furnished by the contractor.

Crossman street, from Norfolk street to West Selden street, is about 696 feet in length. The contract for constructing the surface of this street was awarded to James Doherty August 25, 1913. Work was begun October 15, 1913, and suspended December 5, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone with an artificial stone sidewalk on the north side and a crushed stone sidewalk on the south side. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials by the contractor. The work was completed except the artificial stone sidewalk which is to be laid on the north side in the spring.

Dalrymple street, from Egleston street to Boylston street. This street was practically completed last year. This year the macadam surface was swept off and a sealing coat of tar applied. Work was resumed May 1, 1913, and completed May 2, 1913.

Daves street, from East Cottage street to Willis street, is about 429 feet in length. The contract for constructing the surface of this street was awarded the J. J. McCarthy Company May 6, 1913. Work was begun May 22, 1913, and completed July 5, 1913. It is a 30-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 5-foot artificial stone sidewalks. The straight edgestone and flagging and paving blocks were furnished by the city. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Dexter street, from Alford street to the Everett line, is about 109 feet in length. The surface of this street was constructed by the Paving Service forces. Work was begun November 12, 1913, and completed November 19, 1913. Edgestone was set, block gutters paved and a tar macadam roadway built.

Don street, from Woodrow avenue to Callender street, is about 315 feet in length. The contract for constructing the surface of this street was awarded to the Boston Paving Com-

pany May 1, 1913. Work was begun July 10, 1913, and completed September 6, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Dumas street, from Willowwood street to Mascot street, is about 440 feet in length. The contract for constructing the surface of this street was awarded to James Doherty November 8, 1912. Work was begun May 15, 1913, and completed July 3, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Emmons street, from Paris street to Chelsea street, is about 320 feet in length. The contract for constructing the surface of this street was awarded to J. H. McCarthy Company July 10, 1913. Work was begun August 22, 1913, and completed October 28, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks 7 feet in width, laid under a five (5) year maintenance guaranty. The straight and circular edgestone were furnished by the city on the line of the work. The corners, flagging and granite blocks were furnished by the city at the East Eagle Street Yard and hauled by the contractor. All other materials were furnished by the contractor.

Evans road, from Corey road to the Brookline line, is about 140 feet in length. The contract for constructing the surface of this street was awarded to John J. Lane July 18, 1913. Work was begun August 6, 1913, and completed August 25, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, edgestone was set, 3-foot granite block gutters and flagging crosswalks were laid. The sidewalks, which are 6 feet wide, were constructed with 5-foot artificial stone walk under a five (5) year maintenance guaranty, with the balance a planting space. The ends of the walk next to Corey road are full width, artificial stone and on one side the walk widens to over 11 feet in width to conform to Corey road. The city furnished the straight edgestone at the Brighton Paving Yard, the flagging at Washington street, Brighton, the granite blocks at Boylston street and the circular edgestone on the line of the work. The contractor did the excavating and furnished all other materials necessary to do the work.

Gayland street, from West Cottage street to Judson street. The contract for constructing the surface of this street was awarded to James Doherty October 11, 1913. Work was begun December 22, 1913, and suspended December 30, 1913. The work done this year consisted of the hauling and setting of edgestone. Work will be resumed early in the spring.

Greenock street, from Blue Hill avenue to Harvard street, is about 576 feet in length. The contract for constructing the surface of this street was awarded to James Doherty May 16, 1913. Work was begun June 24, 1913, and completed August 9, 1913. It is a 40-foot street with a 6-inch asphalt macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, corners and flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty. The surplus excavated material was hauled to Almont street.

Hadwin way, from Hyde Park avenue to Hammatt road, is about 268 feet in length. The contract for constructing the surface of this street was awarded to West Roxbury Trap Rock Company November 4, 1913. Work was begun November 7, 1912, suspended December 10, 1912, resumed March 24, 1913, and completed May 22, 1913. It is a 35-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks 6 feet in width, laid under a five (5) year maintenance guaranty. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. All other materials were furnished by the contractor.

Hallet street, from Minot street to the New York, New Haven & Hartford Railroad, is about 1,858 feet in length. The contract for constructing the surface of this street was awarded to James Doherty July 9, 1912. Work was begun September 30, 1912, and suspended January 3, 1913. Work was resumed September 10, 1913, and completed October 24, 1913. It is a 50-foot street with a 6-inch macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 8-foot sidewalks, part brick, part artificial stone and part crushed stone. The circular edgestone was furnished by the city on the line of the work and the flagging at the South End Paving Yard, Albany street. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty.

Hansborough street, from Blue Hill avenue to Harvard street, is about 609 feet in length. The contract for constructing

the surface of this street was awarded to James Doherty May 17, 1913. Work was begun June 10, 1913, and completed July 24, 1913. It is a 50-foot street with a 6-inch asphalt macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 8-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished on the line of the work by the city. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty. The surplus excavated material was hauled by the contractor to Morton and Dumas street.

Hancock and Bowdoin streets, Dorchester, from Winter street to Hancock street, is about 220 feet in length. The contract for constructing the surface of this street was awarded to the Central Construction Company June 26, 1913. Work was begun July 7, 1913, and completed September 12, 1913. This street has a 30-foot brick block roadway on a 6-inch concrete base, with a 10-foot artificial stone sidewalk on the south side and a triangular park space with a 10-foot artificial stone sidewalk on the northeast side. The new granite paving blocks and flagging were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The existing paving materials not used in the work were hauled to the Hancock Street Paving Yard by the contractor. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty.

Holiday street, from Bowdoin street to Toppliff street, is about 1,011 feet in length. The contract for constructing the surface of this roadway was awarded to James Doherty October 2, 1912. Work was begun April 7, 1913, and completed May 26, 1913. It is a 40-foot street with a 6-inch macadam roadway and 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone and flagging was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Homes avenue, from Toppliff street to Draper street, is about 1,001 feet in length. The contract for constructing the surface of this street was awarded to James Doherty September 19, 1912. Work was begun March 19, 1913, and completed May 17, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Howes street, from Dorchester avenue to Pleasant street, is about 591 feet in length. The contract for constructing the surface of this street was awarded to James Doherty November 25, 1912. Work was begun July 8, 1913, and completed July 29, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 8-foot artificial stone sidewalks. The flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Islington street, from Brighton avenue to Webster street. (See Armington street.)

Kilton street, from Park street to Talbot avenue, is about 953 feet in length. The contract for constructing the surface of this street was awarded to James Doherty November 12, 1912. Work was begun July 21, 1913, and completed September 3, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalk, granite edgestone and 7-foot artificial stone sidewalks. The flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Lawndale terrace, from Lamartine street to Amory street, is about 419 feet in length. The contract for constructing the surface of this street from Lamartine street to the New York, New Haven & Hartford Railroad (about 262 feet in length) was awarded to James Doherty August 15, 1913. Work was begun November 12, 1913, and suspended December 5, 1913. It is a 25-foot street with 4-foot sidewalks for about 227 feet from Lamartine street, and is from 25 feet to about 33 feet in width, with 4 to 4½-foot sidewalks near the railroad. It has a 6-inch tar macadam roadway, 2½-foot granite block gutters, flagging crosswalks, granite edgestone and when completed will have artificial stone sidewalks. The work is completed with the exception of laying artificial stone walks. The cinders for foundation are already placed. A wooden fence with iron posts was erected on the easterly approach to the tunnel and a crosswalk was laid across Amory street, opposite the end of Lawndale terrace. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks were furnished by the city at Norfolk street and hauled by the contractor. All other material was furnished by the contractor.

Lithgow street, from Washington street to Talbot avenue, is about 464 feet long. The contract for constructing the surface

of this street was awarded to Jeremiah J. McCarthy Company May 1, 1913. Work was begun May 5, 1913, and completed June 18, 1913. It is a 40-foot street, with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestones and artificial stone sidewalks 7 feet in width. There was a considerable amount of artificial stone sidewalk on the street and this was allowed to remain, the old edgestone being reset where necessary. The new artificial stone was laid under a five (5) year maintenance guaranty. The new straight edgestone and corners were furnished by the city on the line of the work. The flagging was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks were furnished by the city on Washington street, Dorchester, and hauled by the contractor. The surplus excavated materials were hauled by the contractor to Morton street. All other materials were furnished by the contractor.

Lovering place, from Washington street to Harrison avenue, is about 331 feet in length. The contract for widening and constructing the surface of this street was awarded to James Doherty April 28, 1913. Work was begun May 5, 1913, and completed June 16, 1913. The street is from 23.4 to 23.9 feet in width. The roadway was surfaced with 1½ inches of Acme asphalt and 1½ inches bituminous concrete binder on a 6-inch Portland cement concrete base; the northerly sidewalk, 4 feet in width, was laid with artificial stone, the southerly side was laid with brick and the edgestone was reset. The asphalt pavement and artificial stone sidewalk was laid under a five (5) year maintenance guaranty. The city furnished the straight edgestone, corners, flagging and paving blocks at the South End Paving Yard, Albany street, and sidewalk brick on the line of the work. The contractor did the excavating and furnished all other materials necessary to do the work.

Mascoma street, from Quincy street to Lawrence avenue, is about 605 feet in length. The contract for constructing the surface of this street was awarded to Fred S. & A. D. Gore Corporation November 15, 1912. Work was begun June 26, 1913, and completed October 23, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 7 feet in width, laid under a five (5) year maintenance guaranty. The circular edgestone was furnished by the city on the line of the work. The straight edgestone was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks and flagging were furnished by the city at Warren avenue and hauled by the contractor. All other materials were furnished by the contractor.

Mascot street, from Mountain avenue to Ballou avenue, is about 1,151 feet in length. The contract for constructing the

surface of this street was awarded to James Doherty November 8, 1912. Work was begun March 10, 1913, and completed July 3, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The flagging, paving blocks and straight edgestone were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty.

Maxfield street, from La Grange street to Bellevue street, is about 769 feet in length. The contract for constructing the surface of this street was awarded to the West Roxbury Trap Rock Company November 2, 1912. Work was begun April 29, 1913, and completed July 26, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot sidewalks, consisting of 4½ feet artificial stone walk and seeded loam space. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty. A part of the edgestone was set on a crushed stone concrete foundation. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging were furnished by the city at the South End Paving Yard and hauled by the contractor. The granite blocks were furnished by the city at Washington street (Dorchester) and corners at Centre street and La Grange street and hauled by the contractor. All other materials were furnished by the contractor.

Mitchell street, from Old Colony avenue 265 feet northerly, was constructed by William J. Rafferty, under contract dated August 15, 1913. Work was begun October 6, 1913, and completed November 18, 1913. It is a 20-foot street with 6-inch tar macadam roadway, 2½-foot granite block gutters, flagging crosswalks, granite edgestone and brick sidewalks, 3½ feet in width. The circular edgestone and sidewalk bricks were furnished by the city on the line of the work. The straight edgestone and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks were furnished by the city at the South Boston Paving Yard and hauled by the contractor. A dry rubble and concrete wall, about 53 feet long, was built on the easterly side. A part of the rubble stone for wall was obtained from the old wall on Old Colony avenue. All the other materials were furnished by the contractor.

Montclair avenue, from Centre street across Fletcher street, is about 1,106 feet in length. The contract for constructing the surface of this street was awarded to Thomas F. Minton October 10, 1912. Work was begun June 10, 1913, and completed October 3, 1913. It is a 40-foot street with a 6-inch tar macadam

roadway, 3-foot granite block gutters, flagging crosswalk, granite edgestone and artificial stone sidewalks, 7 feet in width, laid under a five (5) year maintenance guaranty. A part of the edgestone was set on a crushed stone foundation. The circular edgestone and flagging were furnished by the city on the line of the work. The straight edgestone was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks were furnished by the city at Centre and South streets and on Huntington avenue, and hauled by the contractor. All other materials were furnished by the contractor.

Mountfort street, from Audubon road to St. Mary's street, is about 306 feet in length. The contract for constructing the surface of this street was awarded to James Doherty May 17, 1913. Work was begun August 30, 1913, and completed September 22, 1913. It is a 50-foot street with a 6-inch asphalt macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 8-foot artificial stone sidewalks laid under a five (5) year maintenance guaranty. The city furnished the straight edgestone and flagging at the South End Paving Yard, the granite paving blocks at Pleasant street and circular edgestone on the line of the work. The contractor did the excavating and furnished all other materials for doing the work.

Naples road, from Commonwealth avenue to Brookline line, is about 135 feet in length. The contract for constructing the surface of this street was awarded to John J. Lane July 18, 1913. Work was begun July 21, 1913, and completed August 6, 1913. It is a 50-foot street with 3-foot block gutters, flagging crosswalks, granite edgestone, 6-inch tar macadam roadway and 8-foot artificial stone sidewalks laid under a five (5) year maintenance guaranty. The city furnished the straight edgestone, corners and flagging at the Brighton Paving Yard and the second-hand paving blocks on Boylston street. The contractor did the excavating and furnished all other materials necessary to do the work.

Norfolk street, from Washington street to New York, New Haven & Hartford Railroad Bridge, is about 4,205 feet in length. The contract for constructing the surface of this street was awarded to James Doherty April 21, 1913. Work was begun October 24, 1913, and suspended December 29, 1913. It is a 60-foot street with a bitulithic roadway, on a 6-inch concrete base, flagging crosswalks, granite edgestone and 8-foot artificial stone sidewalks. The street has been regulated from Washington street to Woodrow avenue and the roadway paved with bitulithic. The tracks of Boston Elevated Railway have been paved with granite block within the same limits. Considerable grading has been done on the remainder of the street, and more than one-half the edgestone has been set thereon. Work was suspended on account of cold weather and will be resumed in

the spring. The Paving Service forces entered the street March 19, 1913, and did some rough grading. This work was completed June 28, 1913.

Normandy street, from Creston street to Intervale street, is about 265 feet in length. Contract for constructing the surface of this street was awarded to Hugh J. McGuire November 10, 1913. Work was begun November 19, 1913, and completed December 23, 1913. It is about a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite and artificial stone edgestones and artificial stone sidewalks about 7 feet in width. The new artificial stone sidewalks were laid under a five (5) year maintenance guaranty. The old artificial stone sidewalk and curb on the northerly side for about 152 feet from Creston street and on the southerly side for about 60 feet was allowed to remain. The straight edgestone and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The granite blocks were furnished at the Massachusetts avenue lot and hauled by the contractor. All other materials were furnished by the contractor.

Orient avenue, from Walley street to beyond Tower street, about 2,075 feet in length. The contract for grading and constructing the street was awarded to James Doherty June 13, 1913. Work was begun June 23, 1913, and completed November 6, 1913. It is a 40-foot street with a 6-inch asphalt macadam roadway, 3-foot granite blocks, gutters, flagging crosswalks, granite edgestone, and 8-foot artificial stone sidewalks, laid under a five (5) year maintenance guaranty. There is a large triangular planting park or planting space at the lower end next to Walley street. The city furnished the corners and part of the flagging at the East Eagle Street Yard and the balance of the flagging, straight and circular edgestone on the line of the work. The contractor did the excavating and furnished all other materials necessary to do the work.

Perkins street, from Prince street to Brookline line, is about 315 feet in length. This street is being constructed by the Paving Service forces. Work was begun August 18, 1913, and was suspended September 29, 1913. Work done this year consisted in widening, laying block dish gutters and constructing macadam roadway. The street is completed with the exception of sidewalks.

Playstead road, from Savin Hill avenue to Springdale street, is about 335 feet in length. The contract for constructing the surface of this street was awarded to William J. Rafferty Company May 2, 1913. Work was begun May 13, 1913, and completed July 14, 1913. It is a 40-foot street with a 3-foot granite block gutter, flagging crosswalk and granite edgestone. The 7-foot artificial stone sidewalks were furnished and laid under a five (5) year maintenance guaranty. The city furnished the

straight edgestone and flagging at the South End Paving Yard, the circular edgestone and sidewalk brick on the line of the work. The contractor did the excavating, which included rock cutting, and furnished the granite paving blocks and all other materials required to do the work.

Pleasant street, from Eliot street to Washington street, is about 1,673 feet in length. The contract for widening and constructing the surface of this street was awarded to Coleman Brothers July 11, 1913. Work was begun October 2, 1913, and suspended December 24, 1913. This street as widened varies from 60 to about 67 feet, with 10-foot artificial stone sidewalks, laid under a five (5) year maintenance guaranty. The edgestone was reset and the roadway, with the exception of that portion from the westerly side of Tremont street to the easterly side of Shawmut avenue, was paved with wood blocks on a 6-inch Portland cement concrete base, with sand joints, under a five (5) year maintenance guaranty. The portion of the roadway above mentioned is paved temporarily with old granite blocks, gravel bed and joints. The bridge over the Boston Elevated Railway tracks at the subway entrance is paved with wood blocks. The city furnished the straight edgestone corners and flagging at the South End Paving Yard, Albany street, and the new circular edgestone, granite paving blocks and sidewalk bricks on the line of the work. The contractor furnished all other materials necessary to do the work and did the excavating. Work will be resumed early in the spring.

Priesing street, from Mozart street to Chestnut avenue, is about 680 feet in length. The contract for constructing the surface of this street was awarded to the John Kelly Company May 26, 1913. Work begun June 6, 1913, completed July 31, 1913. A 40-foot street, with a 6-inch tar macadam roadway, was constructed for a distance of about 225 feet from Mozart street, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 7 feet in width, were constructed on the remainder of the street. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging were furnished by the city at the South End Paving Yard, Albany street, and were hauled by the contractor. The granite blocks were furnished by the city at Centre and South streets and hauled by the contractor. All other materials were furnished by the contractor.

Providence street, from 70 feet east of Church street to Berkeley street, about 1,117 feet in length, was paved with granite block, with pitch joints, on a 6-inch Portland cement concrete base with sand bed. The contract was awarded to Coleman Brothers June 30, 1913. Work was begun July 7, 1913, and completed August 21, 1913. The street varies in width from 40 to 100 feet. The contractor set and reset edgestone and

furnished and laid an artificial stone sidewalk on the northerly side of the street, under a five (5) year maintenance guaranty. This walk is 15 feet in width from Church to Arlington street and 7 feet wide from Arlington to Berkeley street. A 3-foot brick sidewalk was laid on the south side of the street from Arlington street to Berkeley street. The city furnished the straight edgestone, corners and flagging at the South Paving Yard, Albany street, and the circular edgestone and sidewalk brick on the line of the work. The contractor did the excavating and furnished the new granite paving blocks and all other materials necessary to do the work.

Quincefield street, from Humphreys street to Wendover street, is about 263 feet in length. The contract for constructing the surface of this street was awarded to James Doherty April 29, 1913. Work was begun June 21, 1913, and completed July 16, 1913. It is a 35-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 6-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Roach street, from Dorchester avenue to Pleasant street, is about 434 feet in length. The contract for constructing the surface of this street was awarded to James Doherty August 4, 1913. Work was begun October 22, 1913, and suspended November 19, 1913. It is a 30-foot street, with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 5-foot artificial stone sidewalks. The straight edgestone, corners, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The surplus excavated material was hauled to the Mill street dump by the contractor. The construction is completed except the artificial stone sidewalks, which the contractor was unable to lay on account of cold weather. The sidewalk will be laid in the spring.

Sachem street, from Hillside street to Parker Hill avenue, is about 909 feet in length. The contract for constructing the surface of this street was awarded to John McCourt & Co. September 26, 1912. Work was begun October 8, 1912, and suspended December 8, 1912. Work was resumed April 10, 1913, and completed May 22, 1913. It is a 40-foot street for most of its length, with a 6-inch water bound macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone, ground water-drain and 7-foot brick sidewalks. There is a concrete retaining wall and fence about 94 feet long on the lower side of the street. The work done this year consisted of resetting edgestone and relaying block gutters, laying cross-

walks, placing a macadam surface, laying the brick sidewalks, and building a fence on the lower side of the street. The city furnished the straight edgestone, flagging and corners at the South End Paving Yard, Albany street, the paving blocks at the Brighton Paving Yard, Washington street, Dorchester, and District 7 Paving Yard. The circular edgestone and sidewalk bricks were furnished on the line of the work. The contractor furnished all other materials.

Sheffield road, from Walter street to Selwyn street, is about 706 feet in length. The contract for constructing the surface of this street was awarded William J. Rafferty Company September 9, 1913. Work was begun September 27, 1913, and completed November 28, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 7 feet in width, laid under a five (5) year maintenance guaranty. The circular edgestone was furnished by the city on the line of the work. The straight edgestone, corners and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks were furnished by the city at the Massachusetts avenue lot and Centre and South streets, and hauled by the contractor. All other materials were furnished by the contractor.

Silloway street, from Melville avenue to Mather street, is about 382 feet in length. The contract for constructing the surface of this street was awarded to James Doherty November 8, 1912. Work was begun June 5, 1913, and completed July 14, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and a 7-foot sidewalk, $4\frac{1}{2}$ feet of which is artificial stone and the remainder loam space. The straight edgestone and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The artificial stone sidewalk was laid under a five (5) year maintenance guaranty.

Spring street, from Webster street to Charles river, is about 1,588 feet in length. The contract for constructing the surface of this street was awarded to the West Roxbury Trap Rock Company September 29, 1913. Work was begun October 6, 1913, and suspended December 19, 1913. It is to be an 80-foot street with a double car track paved with a granite block, and a 6-foot asphalt macadam roadway each side of tracks, flagging crosswalk at side street, granite edgestones and crushed stone sidewalks 13 feet in width. The work this year has consisted of rough grading.

Tellow street, from Worthington street to the Tremont entrance, is about 240 feet in length. The contract for constructing the surface of this street was awarded to James Doherty October 12, 1912. Work was begun April 8, 1913, and completed May 6, 1913. It is a 50-foot street with a 6-inch

tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 12-foot sidewalks with a seeded loam space. The old brick sidewalk on the south side of the street was relaid and an artificial stone walk 7 feet wide was laid on the northerly side of the street. The city furnished the straight edgestone and flagging at the South End Paving Yard, Albany street, the circular edgestone and sidewalk brick on the line of the work and the granite paving blocks for the gutters near the line of the work. The contractor furnished all other materials necessary to do the work.

Tucker street, from Woodrow avenue to Callender street, is about 378 feet in length. The contract for constructing the surface of this street was awarded to Fred S. and A. D. Gore Corporation November 8, 1912. Work was begun March 20, 1913, and completed June 25, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Tyndale street, from Walworth street to Guernsey street, is about 1,946 feet in length. The contract for constructing the surface of this street was awarded Hugh J. McGuire May 12, 1913. Work was begun May 15, 1913, and completed November 15, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 7 feet in width. A greater portion of the old artificial stone walk on the northerly side near Guernsey street was found in good condition and allowed to remain. The artificial stone sidewalk was laid under a five (5) year maintenance guaranty. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks were furnished by the city at Centre and South streets, Massachusetts avenue lot and at the corner of South and Oakland streets, and hauled by the contractor. All other materials were furnished by the contractor.

Union Park street, from Washington street to Harrison avenue, is about 454 feet in length. The contract for widening and constructing the surface of this street was awarded to Fred S. & A. D. Gore Corporation April 25, 1913. Work was begun May 28, 1913, and completed June 28, 1913. This street, as constructed, varies in width from about 63 feet to 77.4 feet. The roadway is paved with $1\frac{1}{2}$ inches of Acme asphalt wearing surface on $1\frac{1}{2}$ inches of bituminous concrete binder on a 6-inch Portland cement concrete base. The sidewalks, varying in width from 10 feet to 13 feet, are artificial stone. The con-

tractor also reset the edgestone and laid the crosswalks. The city furnished the straight edgestone at the South End Paving Yard, Albany street, and the circular edgestone, corners and flagging on the line of the work. The contractor did the excavating and furnished all other materials necessary to do the work. There was some wood block pavement laid on Harrison avenue next to the street car rail. The asphalt, wood block and artificial stone sidewalk were laid under a five (5) year maintenance guaranty.

Vesta road, from Blue Hill avenue to Harvard street, is about 537 feet in length. The contract for constructing the surface of this street was awarded to James Doherty May 16, 1913. Work was begun September 25, 1913, and completed November 11, 1913. It is a 40-foot street with a 6-inch asphalt macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty. The surplus excavated material was hauled to Almont street by the contractor.

Walworth street, from Belgrade avenue across Brook street, is about 949 feet in length. The contract for constructing the surface of this street was awarded Hugh J. McGuire May 12, 1912. Work was begun August 21, 1913, and completed December 5, 1913. It is a 50-foot street with a 6-inch tar macadam roadway, flagging crosswalks, granite edgestone and artificial stone sidewalks, 8 feet in width, laid under a five (5) year maintenance guaranty. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks for crosswalks were furnished by the city at the Massachusetts avenue lot and hauled by the contractor. All other materials were furnished by the contractor.

Whitfield street, from Wheatland avenue to Talbot avenue, is about 797 feet in length. The contract for grading and surfacing this street was awarded to William J. Rafferty Company May 23, 1913. Work was begun June 13, 1913, and completed August 28, 1913. It is a 40-foot street with a 6-inch asphalt macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 7 feet in width, laid under a five (5) year maintenance guaranty. The city furnished the straight edgestone at the South End Paving Yard, Albany street, the gutter blocks at the Massachusetts avenue lot and Washington street, Dorchester, flagging at Washington street, Dorchester, and the circular edgestone on the line of the work. The contractor furnished all other materials necessary to do the work.

GENERAL.

Alban street, from Welles avenue to Ashmont street, is about 1,358 feet in length. The contract for constructing the artificial stone sidewalks, regulating and gutters on this street was awarded to James Doherty July 10, 1913. It is a 40-foot street with a macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, corners, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty. The surplus excavated material was hauled to the Mill street dump by the contractor.

Armandine street, from Milton avenue to Washington street, is about 1,398 feet in length. The contract for constructing artificial stone sidewalks and regulating the edgestone, gutters and crosswalks on this street was awarded to J. J. McCarthy Company June 31, 1913. It is a 40-foot street with a macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, corners, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Bernard street, from Harvard street to Kerwin street, is about 910 feet in length. The contract for constructing the artificial stone sidewalks and regulating on this street was awarded to Thomas J. Hind, Inc., August 4, 1913. It is a 50-foot street with a macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 8-foot artificial stone sidewalks. The straight edgestone, corners, flagging and paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Blue Hill avenue, from Washington street about 192 feet southerly. The contract for constructing an artificial stone sidewalk and regulating edgestone and gutters on the easterly side was awarded Robert Eagar, Jr., September 12, 1913. The contractor furnished all new material. The sidewalk was laid under a five (5) year maintenance guaranty.

Centre street (north side), from Allston street to the Shawmut Branch Railroad, is about 300 feet in length. The contract for constructing an artificial stone sidewalk and regulating edgestone and gutters was awarded to James Doherty October 28, 1913. It is a 45-foot street with a macadam roadway, 3-foot granite block gutters, flagging crossings, granite edgestone

and a 7-foot artificial stone sidewalk. The straight edgestone and paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The sidewalk was laid under a five (5) year maintenance guaranty.

Chelsea Bridge South, from Scott's court to angle near the draw, is about 347 feet in length. The iron fence on the northerly side was reconstructed by the W. A. Snow Iron Works, under contract. New top and bottom rails and thirteen new posts were furnished by the contractor who also did all work of reconstruction.

Cohasset street, from Corinth street to Albano street, is about 1,014 feet in length. The contract for constructing artificial stone sidewalks in this street was awarded Martino DeMatteo July 28, 1913. The sidewalks, 6 feet in width, were laid under a five (5) year maintenance guaranty. The contractor furnished all the materials and also did a small amount of regulating.

Conway street, from South street to Fairview street, is about 802 feet in length. The contract for constructing 3-foot granite block gutters, resetting edgestone and laying artificial stone sidewalks on this street and on *Fairview street* (south side), from Conway street 350 feet easterly, was awarded Martino DeMatteo August 4, 1913. The sidewalks are 6 feet 8 inches wide on Conway street, from South street to the bend, and 7 feet wide on Conway street, from the bend to Fairview street, and on the south side of Fairview street, from Conway street to 350 feet easterly. The artificial stone was laid under a five (5) year maintenance guaranty. The straight edgestone and corners were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The granite blocks were furnished by the city and hauled by the contractor, part from Washington street, at Tower street, part from Norfolk street, part from Park street, between Anawan avenue and Centre street, and part from Massachusetts avenue lot. All other materials were furnished by the contractor.

Dennis street, from Dudley street to Woodville street, is about 1,038 feet in length. The contract for constructing 3-foot granite block gutters, flagging crosswalks, setting and resetting edgestone and laying artificial stone sidewalks 6 feet to 7 feet in width was awarded to James Doherty June 9, 1913. The circular edgestone was furnished by the city on the line of the work. The straight edgestone was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite blocks were furnished by the city at Washington street, Dorchester, and hauled by the contractor. The old sidewalk bricks were hauled by the contractor to the Massachusetts avenue lot. The artificial stone sidewalks were

laid under a five (5) year maintenance guaranty. All other materials were furnished by the contractor.

Dorchester avenue (easterly side), from Belfort street to St. Williams street, is about 174 feet in length; *Hollander street*, from Humboldt avenue about 200 feet westerly, about 250 feet in length, and *Rosedale street*, at numbers 7, 9, 10 and 12, about 55 feet in length. The contract for laying artificial stone sidewalks in these streets was awarded to William J. Rafferty Company June 27, 1913. The contractor reset the edgestone and repaved the gutters where necessary, and laid the artificial stone sidewalks under a five (5) year maintenance guaranty. He also did some rock excavation. The city furnished the circular edgestone on the line of the work. The contractor furnished all other materials required in doing the work.

Dorchester Paving Yard. The contract for constructing wooden steps in this yard was awarded to Thomas H. Hanlon May 20, 1913. The work consisted in building a flight of heavy wooden steps from Downer avenue to Hancock street, across the northerly side of the city paving yard. All the labor and materials were furnished by the contractor.

Dudley street, between Washington street and Harrison avenue, is about 380 feet in length. The contract for regulating the edgestone, laying crosswalks and furnishing and constructing the artificial stone sidewalks, under a five (5) year maintenance guaranty, was awarded to Robert Eager, Jr., June 9, 1913. In connection with this contract the contractor was ordered to furnish and lay an artificial stone walk and do the regulating on the westerly sidewalk on Warren street, between Dudley street and Zeigler street, about 215 feet in length. The city furnished the straight edgestone required at the South End Paving Yard, Albany street. The contractor hauled the old brick to Dimock Street Yard and furnished all other materials required in doing the work.

Elmo street, from Blue Hill avenue to Erie street, is about 800 feet in length. The contract for constructing the sidewalks and regulating on this street was awarded to James Doherty July 28, 1913. It is a 40-foot street with macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Evelyn street, from Blue Hill avenue to Norfolk street, is about 900 feet in length. The contract for constructing the artificial stone sidewalk and regulating was awarded to the Central Construction Company May 15, 1913. The contract for constructing the roadway was awarded to J. J. McCarthy Company July 28, 1913. It is a 40-foot street with a 6-inch tar macadam road-

way, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, corners, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The sidewalk was laid under a five (5) year maintenance guaranty. The surplus excavated material was hauled to Almont street by the contractor.

Franklin street (easterly side), between Lincoln and Easton streets, is about 736 feet in length and *Alcott street* (southerly side), from Franklin street about 100 feet easterly. The contract for setting edgestone, paving gutters, furnishing and laying artificial stone sidewalks on these streets was awarded to John J. Lane August 11, 1913. The city furnished the straight edgestone and corners at the South End Paving Yard, Albany street, the flagging at the Brighton Paving Yard and the circular edgestone on the line of the work. The granite paving blocks were on the street. The contractor did the excavating and the above work and furnished all other materials required to do the work. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty.

Germania street, from Boylston street to Bismarck street, is about 709 feet in length. The contractor for grading the roadway of this street and constructing 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks, 5 feet in width, was awarded to John McCourt & Co. July 28, 1913. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite paving blocks were furnished at the Massachusetts avenue lot, at Chestnut Hill avenue and at Dimock street lot, and hauled by the contractor. The contractor furnished all other materials. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty. The Paving Service constructed a 6-inch tar macadam roadway in this street.

Greenwood street, from Elmo street to Erie street, is about 314 feet in length. The contract for constructing artificial stone sidewalks and regulating edgestones and gutters was awarded to James Doherty October 11, 1913. The sidewalks were laid under a five (5) year maintenance guaranty.

Howard street, from Gerard street to Magazine street, is about 427 feet in length. The contract for constructing 3-foot granite block gutters, flagging crosswalks, granite edgestone and brick sidewalks was awarded to the Boston Paving Company June 3, 1913. The circular edgestone and the sidewalk brick were furnished by the city on the line of the work. The straight edgestone, corners and flagging were furnished by the city at the South End Paving Yard and hauled by the contractor. The granite blocks were furnished by the city at Ruggles, Vernon and Marvin streets, and hauled by the contractor. The other materials were furnished by the contractor.

Inwood street, from Olney street to Norton street, is about 418 feet in length. The contract for completing the artificial stone sidewalks on this street was awarded Connolly & Diamond October 9, 1913. The work consisted in removing the grass plot along the curb and substituting artificial stone, laid under a five (5) year maintenance guaranty. All materials were furnished by the contractors.

Massachusetts avenue, westerly side, from the New England Railroad Bridge to Columbia road, is about 2,410 feet in length. The contract for setting edgestone, laying granite block gutters, crosswalks and artificial stone sidewalks was awarded to James Doherty July 10, 1913. The city furnished flagging and corners at the South End Paving Yard, Albany street, and the granite paving blocks and circular edgestone on the line of the work. The contractor furnished the straight edgestone and all other materials required to do the work. The sidewalks were laid under a five (5) year maintenance guaranty.

Metropolitan avenue (southerly side), from Washington street to Kittredge street, is about 678 feet in length. The contract for constructing 3-foot granite block gutters, granite edgestone and artificial stone sidewalks, 8 feet in width, was awarded to the West Roxbury Trap Rock Company November 15, 1912. The work done this year consisted in placing the artificial stone walk which was laid under a five (5) year maintenance guaranty. All materials were furnished by the contractor.

Milton avenue, from Norfolk street to Evans street, is about 1,512 feet in length. The contract for setting and resetting edgestone, paving and repaving granite block gutters, removing trees, furnishing and laying artificial stone sidewalks under a five (5) year maintenance guaranty, was awarded to Fred S. & A. D. Gore Corporation October 19, 1912. This is a 40-foot street with 7-foot artificial stone sidewalks. The city furnished the straight edgestone and flagging at the South End Paving Yard, Albany street, and the second-hand paving blocks on various streets under construction, and the circular edgestone on the line of the work. The contractors furnished all other materials required to do the work. The macadam roadway was resurfaced by the Paving Service forces.

Minot street, from Neponset avenue to Claremont street, is about 2,186 feet in length. The contract for doing the work was awarded to D. M. Biggs & Co. May 14, 1913. The contractor set and reset edgestone, paved and repaved 3-foot granite block gutters, laid flagging crosswalks and constructed the artificial stone sidewalks, which vary from 7 to 9 feet in width, under a five (5) year maintenance guaranty. The city furnished the corners and flagging at the South End Paving Yard, Albany street, and the circular edgestone on the line of the work. The contractor furnished all other materials required to do the work. The macadam roadway was resurfaced by the Paving Service forces.

Minot street, from Charlemont street to Adams street, is about 1,027 feet in length. The contract for doing the work on

this street was awarded to D. M. Biggs & Co. July 28, 1913. The contractor reset the edgestone, repaved the gutters, laid and relaid the crosswalks and constructed the 7-foot artificial stone sidewalks under a five (5) year maintenance guaranty. The city furnished the flagging at the South End Paving Yard, Albany street, and the new circular edgestone on the line of the work. The contractor furnished all other materials required to do the work. The macadam roadway was resurfaced by the Paving Service forces.

Nightingale street, from Talbot avenue to Wales street, is about 565 feet in length. The contract for constructing the artificial stone sidewalks and regulating on this street was awarded to Warren Brothers Company June 9, 1913. It is a 40-foot street with 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. All new materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty:

Park street (westerly side), from Clement avenue to Anawan avenue, is about 1,158 feet in length. The contract for relaying 3-foot granite block gutters, flagging crosswalk, granite edgestone and constructing artificial stone sidewalks, $4\frac{1}{2}$ feet in width, and a seeded loam space was awarded the W. A. Murtfeldt Company July 12, 1913. This contract was extended to include relaying 3-foot granite gutters and constructing flagging crosswalks, granite edgestones and artificial stone sidewalks on the westerly side from March avenue to Centre street, a distance of about 546 feet. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. Old paving blocks were delivered to the contractor from Conway street, and also hauled by the contractor to the Mt. Vernon Street Yard. All other materials were furnished by the contractor.

Pope's Hill street, from Neponset avenue to Freeport street, is about 830 feet in length. The contract for constructing the artificial stone sidewalk and regulating this street was awarded to J. J. McCarthy Company June 27, 1913. It is a 50-foot street with a macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 8-foot artificial stone sidewalks. The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty.

Rose street, from Harrison avenue to Albany street, is about 483 feet in length. A contract for surfacing the old macadam surface with Taric Compound was awarded to the Independent Coal Tar Company November 11, 1913. The contractors fur-

nished all the materials required to do the work. The contractor guarantees to keep the surface in good repair for one year.

South street, from Robert street to Centre street, is about 2,560 feet in length. The contract for constructing 3-foot granite block gutters, granite edgestone, flagging crosswalks and artificial stone sidewalks was awarded Hugh J. McGuire August 31, 1912. Work was begun September 20, 1912, and suspended December 10, 1912. Work was resumed April 2, 1913, and completed May 12, 1913. The work this year has consisted in laying artificial stone sidewalks on the northerly side. The artificial stone sidewalk on the southerly side, from Robert street to Walworth street, 5 feet wide, has a seeded loam space 5 feet wide along the edgestone. From Walworth street about 175 feet east of Centre street a 5-foot artificial stone walk was laid next to the curb. From about 175 feet east of Centre street a crushed stone sidewalk 7 feet in width was laid. On the northerly side an artificial stone walk 9½ feet wide was laid for a distance of about 60 feet east of Fletcher street. From Fletcher street to Bradfield avenue a 5-foot artificial stone walk was laid, with loam space next to curb, from 5 to 7 feet in width. From Bradfield avenue to Ainsworth street an artificial stone walk 7 feet wide was laid with a loam space from 5 to 11 feet in width next to curb. From Ainsworth street about 186 feet east of Guernsey street an artificial stone walk 5 feet wide was laid with loam space 5 feet wide next to curb. From about 186 feet east of Guernsey street to about 257 feet west of Guernsey street an artificial stone sidewalk 5 feet wide was laid with loam space from 2 to 5 feet wide next to curb. From about 257 feet west of Guernsey street to Centre street a crushed stone sidewalk 8 feet in width was constructed. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty. All materials were furnished by the contractor.

Summer street, from B street to the State Viaduct, is about 368 feet in length. The contract for building a concrete wall on the northerly side of the street was awarded to McCarthy & Walsh November 5, 1913. The contractors built a pile bulkhead and tied it by iron rods to the old bulkhead back in the street, and a 2-foot concrete wall was built around this bulkhead, and a hard pine wooden fence was built on the wall. The contractor did the excavating, removed the old plank walk and furnished all the materials necessary to do the work.

Tremont street (northerly side), from St. Alphonsus street about 350 feet easterly and *St. Alphonsus street* (easterly side), from Tremont street to Smith street, 464 feet in length. The contract for furnishing and laying artificial stone sidewalks in these streets, under a five (5) year maintenance guaranty, was awarded to John McCourt Company July 18, 1913. The contractor did the excavating and furnished all the materials necessary to do the work.

Tremont street (easterly side), between Winter street and Hamilton place, is about 312 feet in length. A contract for furnishing and laying artificial stone sidewalks in this street, under a five (5) year maintenance guaranty, was awarded to Warren Brothers Company September 10, 1913. The contractor did the excavating and furnished all the materials necessary to do the work. This work was necessitated by the subway construction. There was considerable artificial stone walk put in where the old brick walks were between Winter and Boylston streets in connection with this contract.

Walnut avenue (easterly side), from Iffley road to beyond Montebello road, is about 287 feet in length. A contract for excavating and grading this street was awarded to John McCourt & Co. June 13, 1913. The contractor did the cutting, which was mostly rock, and furnished all materials required to do the work.

Walnut street, from Franklin street to Ericsson street, is about 1,576 feet in length. The contract for constructing artificial stone sidewalks and regulating on this street was awarded to D. M. Biggs & Co. July 2, 1913. It is a 35-foot street with a macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 6-foot artificial stone sidewalks. The straight edgestone, corners, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The artificial stone sidewalk was laid under a five (5) year maintenance guaranty. The old sidewalk bricks were hauled by the contractor to the Codman Street Paving Yard, and the surplus excavated material to Pope's Hill street.

Washington street, between State street and Boylston street, is about 1,146 feet in length. The contract for furnishing and laying artificial stone sidewalks was awarded to Warren Brothers Company September 8, 1913. The contractor removed all the old brick sidewalk remaining on this section of Washington street and laid artificial stone sidewalks under a five (5) year maintenance guaranty. The contractor did the excavating and furnished all materials necessary to do the work.

Welles avenue (north side), from Talbot avenue to opposite Hawley street, is about 600 feet in length. The contract for constructing artificial stone sidewalks and regulating was awarded to Robert Eager, Jr., May 26, 1913. The sidewalk is 10 feet in width with a 6-foot artificial stone walk and a loam space. The contractor furnished all the materials for the artificial stone. The sidewalks were laid under a five (5) year maintenance guaranty.

Westville street, from Geneva avenue to Draper street, is about 1,408 feet in length. The contract for constructing the sidewalks and regulating on this street was awarded to William J. Rafferty Company August 15, 1913. It is a 40-foot street with a macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and artificial stone sidewalks.

The straight edgestone, flagging and paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The sidewalks were laid under a five (5) year maintenance guaranty. The surplus excavation was hauled to the Mill street dump by the contractor.

Winthrop street, from Blue Hill avenue to Brook avenue, is about 332 feet in length. The contract for laying and relaying 3-foot granite block gutters, flagging crosswalks, setting and resetting granite edgestone and constructing artificial stone sidewalks, 6 to 7 feet in width, was awarded to James Doherty October 28, 1912. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty. About 120 linear feet of artificial stone walk on the easterly side, about 50 feet north of Blue Hill avenue, was found in good condition and allowed to remain. The straight edgestone was furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. Circular edgestone was furnished by the city on the line of the work. The granite blocks were furnished by the city at Washington street, Dorchester, and hauled by the contractor. All other materials were furnished by the contractor.

Withington street, from Norfolk street to Torrey street, is about 652 feet in length. The contract for completing the 3-foot granite block gutters, flagging crosswalks, granite edgestones and artificial stone sidewalks, 7 feet in width, was awarded to W. A. Murtfeldt Company June 27, 1913. The circular edgestone was furnished by the city on the line of the work. The straight edgestone and flagging were furnished by the city at the South End Paving Yard, Albany street, and hauled by the contractor. The granite paving blocks were furnished by the city at the Massachusetts avenue lot and hauled by the contractor. All the other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five (5) year maintenance guaranty.

Woolson street, from Blue Hill avenue to Norfolk street, is about 1,219 feet in length. The contract for constructing the artificial stone sidewalks and regulating was awarded to the Warren Brothers Company May 9, 1913. The contract for constructing the roadway was awarded to J. J. McCarthy July 28, 1913. It is a 40-foot street with a 6-inch tar macadam roadway, 3-foot granite block gutters, flagging crosswalks, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone, corners, flagging and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The sidewalks were laid under a five (5) year maintenance guaranty. The surplus excavated material was hauled to Almont street by the contractor.

Work Done by Contract, 1913.

	Old.	New.	Total, Old and New.
Edgestone set	56,618 linear feet.	75,477 linear feet. ¹	132,095 linear feet.
Concrete base laid	2,700 square yards.	76,568 square yards.	79,268 square yards.
Granite block paving laid, with pitch and pebble joints.....	1,048 " "	11,011 " "	12,059 "
Flagging crosswalks laid, with pitch and pebble joints.....	251 " "	948 " "	1,199 "
Granite block paving laid on a gravel base, with gravel joints.....	14,688 " "	25,943 " "	40,631 "
Flagging crosswalks laid on a gravel base, with gravel joints.....	935 " "	2,136 " "	3,071 "
Granite block paving laid, with grout joints.....	14 " "	.....	14 "
Flagging crosswalks laid, with grout joints.....	.....	20 " "	20 "
Wood block pavement laid.....	3,914 " "	36,383 " "	40,297 "
Asphalt surface and binder laid.....	1,693 " "	1,857 " "	3,550 "
Asphalt patching.....	16,989 " "	.....	16,989 "
Bitulithic patching.....	1,421 " "	.....	1,421 "
Bituminous concrete binder laid.....	.....	2 cubic yards.	2 cubic yards.
Bitulithic pavement laid.....	19 " "	24,398 square yards.	24,417 square yards.
Brick block pavement laid.....	285 " "	1,235 " "	1,520 "
Brick sidewalks laid.....	7,809 " "	2,863 " "	10,672 "
Coal tar sidewalks relaid.....	734 " "	.....	734 "
Crushed stone sidewalks laid.....	.....	1,241 " "	1,241 "
Artificial stone sidewalks laid.....	4,622 " "	120,381 " "	125,003 "

Earth excavation.....	71,119	"	"	71,119	"	"
Earth excavation.....	50,864	cubic yards,		50,864	cubic yards,	
Rock excavation.....	814	"	"	814	"	"
Filling furnished.....	2,500	"	"	2,500	"	"
Macadam surface placed (water-bound).....	6,713	square yards,		6,713	square yards,	
Macadam surface placed (tar preparation).....	56,163	"	"	56,163	"	"
Macadam surface placed (asphalt preparation).....	18,270	"	"	18,270	"	"
Loom furnished and laid.....	1,840	"	"	1,840	"	"
Covers reset.....	584			584		
Drain pipe laid (ground water).....	350	linear feet,		350	linear feet,	
Wooden fence built.....	415	"	"	783	"	"
Wooden bulkhead and concrete wall.....	358	"	"	358	"	"
Wooden steps built.....	185	"	"	185	"	"
Iron fence reconstructed.....	347	"	"	347	"	"
Dry rubble wall and concrete coping.....	53	"	"	53	"	"
Waterproofing.....	262	square yards,		262	square yards,	

¹ 3,806 linear feet laid on concrete and crushed stone foundation.

² About one-quarter ($\frac{1}{4}$) this area laid with existing granite block, formerly gravel joints.

³ About one-half ($\frac{1}{2}$) of this area laid with existing granite flagging, formerly gravel joints.

Work Done by Paving Service Forces, 1913.

	Old.	New.	Total, Old and New.
Edgestones set.....	61,558 linear feet.	9,748 linear feet.	71,306 linear feet.
Edgestones roughed.....	2,397 "	.....	2,397 "
Granite block paving, gravel base and joints, laid.....	82,166 square yards.	1,505 square yards.	83,671 square yards.
Granite block paving, concrete base, pitch joints, laid.....	.....	2,195 "	2,195 "
Gutter paving, gravel base and joints, laid.....	38,076 "	3,555 "	41,631 "
Flagging crosswalks, gravel base and joints, laid.....	22,917 "	1,458 "	24,375 "
Flagging crosswalks, concrete base, pitch joints, laid.....	.....	105 "	105 "
Macadam surface placed (water binder).....	133,705 "	23,448 "	157,153 "
Macadam surface placed (tar preparation binder).....	144,695 "	10,867 "	155,562 "
Macadam surface placed (asphalt preparation binder).....	58,191 "	.....	58,191 "
Macadam surface, patched.....	417,059 "	.....	417,059 "
Brick sidewalks, laid.....	101,157 "	1,783 "	102,940 "
Gravel or crushed stone sidewalks, surfaced.....	215,158 "	.....	215,158 "
Wooden fence built.....	101 linear feet.	555 linear feet.	656 linear feet.
Grading.....	.....	3,507 cubic yards.	3,507 cubic yards.

FINANCIAL STATEMENT, PAVING SERVICE.

Maintenance.

Expenditures from February 1, 1913, to January 31, 1914 (gross)	\$1,392,468	22
Collected for work done and materials furnished different services, departments, individuals and companies, etc.	\$17,621	09
Inspectors' services	5,071	50
		22,692 59
Net expenditures		\$1,369,775 63

*Special Appropriations.**Old Colony Avenue, Construction of.*

Unexpended balance, February 1, 1913	\$16,053	51
Expenditures from February 1, 1913, to January 31, 1914	1,485	65
		\$14,567 86
Highways, making of	\$265,583	18
Arlington street extension *	318	33
Norfolk street, widening *	4,946	60
Union Park street *	8,852	47
Tunnel under railroad tracks between Boylston and Green streets, Jamaica Plain (Lawndale terrace) *	12,227	55
Harvard avenue, Brighton *	645	68
Pleasant street, widening *	26,415	58
Thacher street extension	180	67

INCOME.

Statement showing the amount of bills deposited with the City Collector from February 1, 1913, to January 31, 1914, and credited to general revenue:

On account of edgestone and sidewalk assessments	\$35,778	58
Stone from ledges (Chestnut Hill)	1,540	22
Permits	32,358	28
Junk, old materials, etc.	321	08
		\$69,998 16

* Laid out under chapter 393 of the Acts of 1906.

Amount paid into the city treasury during the year:

On account of edgestone and sidewalk assessments	\$28,292 87
Stone from ledges (Chestnut Hill)	1,382 85
Permits	31,572 92
Sale of junk, old materials, etc.	816 96
	\$62,065 60

Object of Expenditures from the Maintenance Appropriation Classified by Districts from February 1, 1913, to January 31, 1914.

Districts.	Macadam Repairs.	Block Repairs.	Snow.	Street Cleaning.	Edgestone and Sidewalk Repairs.	Crosswalk Repairs.	Street Work.	Schedule A, Miscellaneous.	Totals.
1. South Boston and Dorchester North..	\$3,473 62	\$5,321 89	\$2,687 81	\$2,637 11	\$12,376 56	\$2,009 82	\$67,476 93	.....	\$96,433 74
2. East Boston and Breed's Island.....	7,276 00	1,203 67	1,545 16	1,062 81	8,520 07	719 16	33,262 49	.....	53,589 36
3. Charlestown.....	5,718 26	4,953 10	3,053 28	2,240 44	5,581 51	750 31	23,875 14	.....	46,172 04
4. Brighton.....	8,381 91	148 46	1,993 40	18,545 50	2,259 88	200 64	65,472 86	.....	97,002 65
5. West Roxbury.....	17,365 74	414 68	3,698 10	24,230 04	5,601 60	359 73	77,390 41	.....	129,080 30
6. Dorchester.....	3,898 85	4,590 02	2,828 61	6,888 72	10,112 77	1,244 21	95,418 28	.....	124,981 46
7. Roxbury South and Jamaica Plain....	9,851 94	6,306 97	4,571 92	27,783 62	10,380 92	2,078 76	44,561 20	.....	105,535 33
8. South End and Roxbury North.....	20,976 30	9,649 33	5,120 73	4,356 79	22,328 51	5,304 31	116,590 47	.....	184,326 44
9. Ashmont.....	5,753 89	737 91	927 29	6,909 47	2,671 49	460 24	91,309 30	.....	108,769 59
10. North and West Ends and Back Bay..	9,105 15	8,183 91	4,294 24	4,350 79	10,626 91	3,160 93	18,675 37	.....	58,897 30
11. Hyde Park.....	3,843 94	.....	665 51	5,186 08	3,365 46	346 76	12,412 22	.....	25,819 97
								\$361,213 42	361,213 42
Totals.....	\$95,645 60	\$42,009 94	\$31,386 05	\$104,691 37	\$93,825 68	\$16,634 87	\$646,444 67	\$361,213 42	\$1,391,851 60

SCHEDULE A.

Salary of division engineer (part of)	\$1,250 00
Salary of office clerks, stenographers and messengers	1,480 84
Salary of chief engineer	3,000 00
Salaries of assistant engineers (office work)	11,460 39
Salaries of permit office clerks	8,216 29
Salaries of permit office inspectors	10,530 15
Salaries of engineering inspectors (office work)	5,700 83
Salaries of inspectors on artificial stone sidewalks,	4,675 30
Salaries of district inspectors	6,158 85
Salary of medical inspector	1,000 00
Medical attendance on injured employees	10 20
Salary of chief veterinarian	3,000 00
Salary of inspector of horses	1,016 01
Wages of weigher at Chestnut Hill ledge	707 25
Wages of weigher at Centre street ledge	552 00
Wages of weigher and watchmen at Dimock street yard	2,980 50
Pensions paid to veterans of Civil War (retired),	11,876 12
Pensions paid to retired laborers	14,548 40
Pay allowed injured employees	947 25
Holidays, not including holidays charged to street accounts	44,406 55
Automobile expense, division engineer	2,079 41
Gasolene, grease, etc.	\$229 51
Repairs	206 20
New tires and tubes	290 43
Repairing tires and tubes	13 65
Wages of chauffeur	1,113 00
Supplies	226 62
Automobile expense, chief engineer	3,281 39
Gasolene, grease, etc.	\$297 09
Repairs	1,406 56
New tubes and tires	320 55
Repairing tubes and tires	19 85
Wages of chauffeur	1,109 50
Supplies	127 84
Automobile expense, emergency car	801 84
Rambler runabout (new)	\$800 00
Gasolene, grease, etc.	1 84
Automobile expense, old emergency car	533 47
Repairs	\$461 28
Supplies	14 27
Gasolene	57 92
Automobile repairs, permit clerk	100 94
Advertising (miscellaneous)	12 40
Carried forward	\$140,326 38

<i>Brought forward</i>		\$140,326 38
Newspapers, magazines, etc.		3 00
Printing		2,808 35
Postage		568 80
Stationery		757 79
Traveling expenses, car fares, etc.		794 45
Engineering supplies and incidentals		1,530 71
Artificial stone sidewalks		19,067 98
Rebates allowed to contractors	\$14,411 42	
Repairs made	2,825 46	
Torrey street, Dorchester	115 02	
Washington, at Torrey street	171 36	
Union Park street	254 70	
Brattle square	43 02	
Washington street, Roxbury	245 70	
Cliff street	140 40	
Dana street	47 52	
Tunnel, Roslindale	72 00	
Market street, at cemetery	275 20	
Columbia road, at K street	152 46	
Morton street	56 16	
Dakota street	75 43	
Kenwood street	178 03	
Advertising	4 10	
Asphalt and bitulithic pavements repaired		29,094 43
Temporary repairs, labor, materials, etc.	\$938 85	
Engineering	343 40	
Inspection	1,731 89	
Engineering expense	9 10	
Advertising	4 50	
Amount paid to Barber Asphalt Paving Company	100 17	
Amount paid to Warren Brothers Company, asphalt	24,672 80	
Amount paid to Warren Brothers Company, bitulithic repairs	1,293 72	
New crosswalks, not included elsewhere		4,375 24
Fence repairs		4,231 64
Plank walk repairs		1,953 29
Edgestones, sidewalks and gutters, new, not included elsewhere		12,946 71
Rent of land, etc.		4,756 63
Taxes (net)		612 90
Horses purchased and exchanged (net cost)		1,599 58
Buggies, carts and wagons, new		690 00
Expense of stables, including drivers, feeders, fodder, horseshoeing, repairs to harnesses, carts, etc.	\$123,251 82	
<i>Carried forward</i>	\$123,251 82	\$226,117 88

<i>Brought forward</i>	\$123,251 82	\$226,117 88
Amount earned by department teams	93,428 24	
		29,823 58
Scarifier		466 00
Electric lighting, yards and stables		909 76
Gas lighting, yards and stables		142 44
Fuel for heating yard buildings, offices and stables, ...		1,968 82
Electrical appliances, labor and stock, yards and stables		1,125 54
Furniture, yards and stables		26 31
Rent of towels		160 60
Stoves, pipes, grates, etc.		124 44
Telephone service		1,330 71
Derricks, repairing, etc.		557 16
Dumping boat service		4 75
Oil for street lighting		821 44
Ice		80 98
Oatmeal		42 72
Signs, making and putting up		9,846 33
Numbering streets, salaries		1,219 53
Numbering streets, figures for		21 25
Tools, hardware, etc., new; cost of repairing, etc., ...		21,190 84
Executions of courts and damages		1,628 68
Snow dumps		760 87
Scale repairs		49 19
Expenses of yards, including salaries of foremen, yardmen, watchmen, tool wagon, etc.		43,714 72
Repairing yard offices, stables, sheds, etc.		9,573 61
Painting buildings at North End Yard		390 00
Altering blacksmith shop, stable, heating plant and steam roller shed at Brighton Paving Yard, ...		5,103 98
Repairing tar concrete sidewalks		374 95
Sanding icy and slippery streets		1,231 81
Sanitary Service, work done and material furnished, not shown elsewhere		¹ 253 53
Sewer Service, work done and material furnished, not shown elsewhere		² 2,494 34
Work done and material furnished, individuals, corporations, etc.		³ 721 11
Work done and material furnished, Schoolhouse Department		⁴ 48 14
Work done and material furnished, Bridge Service, not included elsewhere		⁵ 165 22
Work done and material furnished, Water Service, not included elsewhere		⁶ 341 78
<i>Carried forward</i>		\$362,833 01

¹ \$253.53 paid through City Collector.² \$1,852.43 paid through City Collector.³ \$721.11 paid through City Collector and \$14.40 withdrawn.⁴ \$23.94 paid through City Collector.⁵ \$165.22 paid through City Collector.⁶ \$341.78 paid through City Collector.

<i>Brought forward</i>		\$362,833 01
Repairing culverts and building new culverts		664 22
Motor cycle expense		282 82
New Indian	\$185 00	
Repairs	68 31	
Registration	4 50	
Gasolene, oil and supplies	25 01	
Removal of gypsy moths		40 77
Making cases for Central Office		80 16
Catch-basins, marking locations		202 50
Teaming empty oil barrels, etc.		47 44
Trimming and removing trees		210 84
Services of constable		2 81
Photographs		12 60
Sundries		6 73
Grass seed		7 39
Cleaning streets after fire in Roxbury		784 36
Fire extinguishers		403 83
Bandages		5 50
Membership in Association for Standard Specifications		25 00
Columbus Day parade		8 50
Repairs to Traverse Street Subway		92 78
Scale repairs at Chestnut Hill avenue ledge		368 57
Scale repairs at Dimock Street Yard		75 45
Stock, materials	\$81,541 84	
Stock, handling and teaming	18,454 09	
	\$99,995 93	
Less stock delivered on streets	97,278 17	
		2,717 76
		\$368,873 04
Steam rollers, amount earned	\$27,303 63	
Steam rollers, cost of operating, repairing, etc.	19,644 01	
		7,659 62
		<u>\$361,213 42</u>

STREET WORK DONE IN PART BY CONTRACT AND
DEPARTMENT FORCE AND CHARGED TO THE MAIN-
TENANCE APPROPRIATION.

Beacon street, between Massachusetts avenue and Raleigh street. Length, 1,526 linear feet. Area, 2,229 square yards. Wood block pavement laid and relaid.

Engineering	\$32 62
Inspection	115 50
Engineering expense	25

Carried forward \$148 37

<i>Brought forward</i>		\$148 37	
Amount paid to Central Construction Com-			
pany, under contract:			
9 cubic yards concrete base			
furnished and laid @			
\$6.90	\$62 10		
750 square yards wood block			
pavement furnished and			
laid @ \$3.27	2,452 50		
Addition to contract:			
1,479 square yards wood block			
pavement (3½-inch			
block) furnished and			
laid @ \$3.15	4,658 85		
		7,173 45	
			<u>\$7,321 82</u>

Armadine street, between Milton avenue and Washington street. Length, 1,398 linear feet. Area, 4,039 square yards. Edgestone set, block gutters paved and artificial stone sidewalks constructed.

Engineering	\$69 85	
Inspection	182 00	
Engineering expense	2 20	
Labor, handling stock	31 65	
Advertising	4 40	
Edgestone, 1,914 feet straight, 93 feet 3 inches		
circular and 36 small corners	1,514 46	
Flagging, 16 feet	12 80	
Blocks, old granite, 29,690	418 08	
Amount paid to Jeremiah J. McCarthy, under		
contract:		
17 trees removed @ \$10	\$170 00	
22 cubic yards water box		
excavation @ \$1	22 00	
27 cubic yards rock excava-		
tion @ \$4	108 00	
1,890 linear feet straight edge-		
stone and corners		
hailed and set @ 28c.,	529 20	
71 linear feet circular edge-		
stone set @ 15c.	10 65	
592 linear feet existing edge-		
stone reset @ 15c.	88 80	
853 square yards granite		
block paving hauled		
and laid @ 75c.	639 75	
88 square yards existing		
granite block paving		
relaid @ 40c.	35 20	
4 square yards flagging		
crosswalks hauled and		
laid @ \$1	4 00	
15,374 square feet artificial		
stone sidewalks fur-		
nished and laid @ 18c.,	2,767 32	
1,177 square feet artificial stone		
driveways furnished		
and laid @ 18c.	211 86	
1 cover reset @ \$3	3 00	
<i>Carried forward</i>	\$4,589 78	\$2,235 44

<i>Brought forward</i>	\$4,589 78	\$2,235 44	
Extra work — Remove existing edgestones and construct driveways where directed:			
47 hours, foreman, @ 62½c.,	29 38		
99½ hours, edgestone setter, @ 62½c.	62 19		
81½ hours, stonecutter, @ 62½c.	50 94		
298½ hours, tender, @ 31¼c.	93 28		
226 hours' labor @ 25c.	56 50		
Plus 15 per cent on \$292.29	43 84		
6 days, double team, @ \$6,	36 00		
1½ days, single team, @ \$3.50	5 25		
139 linear feet edgestone hauled @ 8c.	11 12		
		4,978 28	
		\$7,213 72	
Credit: Bricks, 7,500		52 50	
		<u>\$7,161 22</u>	

Alcott street, southerly side, from Franklin street about 100 feet easterly. Length, 100 linear feet. Area, 643 square feet. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Inspection	\$10 50		
Advertising	2 15		
Amount paid to John J. Lane, under contract:			
107 linear feet existing edgestone reset @ 15c.	\$16 05		
36 square yards existing granite block paving relaid @ 35c.	12 60		
643 square feet artificial stone sidewalks furnished and laid @ 16c.	102 88		
		131 53	
		<u>\$144 18</u>	

Alban street, between Welles avenue and Ashmont street. Length, 1,358 linear feet. Area, 3,948 square yards. Edgestone reset, block gutters repaved, flagging crosswalks relaid and artificial stone sidewalks constructed.

Engineering	\$47 78		
Inspection	45 50		
Engineering expense	2 20		
Advertising	4 00		
Teaming	3 00		
Edgestone, 3 feet 7 inches	1 25		
Amount paid to James Doherty, under contract:			
1,852 linear feet existing edgestone reset @ 13c.	\$240 76		
530 square yards existing granite block paving relaid @ 40c.	212 00		
<i>Carried forward</i>	\$452 76	\$103 73	

<i>Brought forward</i>	\$452 76	\$103 73
10,575 square feet artificial stone sidewalks furnished and laid @ 17 $\frac{1}{4}$ c.	1,824 19	
1,042 square feet artificial stone driveways furnished and laid @ 17 $\frac{1}{4}$ c.	179 75	
Constructing dry well	5 00	
Extra work — Remove trees where directed:		
148 hours' labor @ 25c.	37 00	
Plus 15 per cent on \$37	5 55	
4 hours' double team @ 68 $\frac{3}{4}$ c.	2 75	
Extra work — Regulate Bradley head catch- basin as directed:		
6 hours, mason, @ 62 $\frac{1}{2}$ c.	3 75	
12 hours, tender, @ 25c.	3 00	
Plus 15 per cent on \$6.75, ...	1 01	
		2,514 76
		\$2,618 49
Credit: Bricks, 2,400	\$16 80	
Blocks, 1,200	24 00	
		40 80
		<u>\$2,577 69</u>

Centre street, northerly side, between Allston street and Shawmut Branch Railroad. Length, 300 linear feet. Reset edgestone, relay block gutters, relay flagging crosswalks and construct artificial stone sidewalks.

Engineering	\$8 17	
Inspection	15 75	
Engineering expense	40	
Edgestone, 136 feet 5 inches	52 16	
Blocks, 1,650 old granite	33 00	
Labor, handling stock	18	
Amount paid to James Doherty, under contract:		
136 linear feet straight edge- stone hauled and set @ 25c.	\$34 00	
163 linear feet existing edge- stone reset @ 12c.	19 56	
45 square yards granite block paving hauled and laid @ 70c.	31 50	
58 square yards existing gran- ite block paving relaid @ 37c.	21 46	
1,913 square feet artificial stone sidewalks furnished and laid @ 15 $\frac{3}{4}$ c.	301 30	
108 square feet artificial stone driveways furnished and laid @ 15 $\frac{3}{4}$ c.	17 01	
Extra work — Remove tree where directed:		
12 hours' labor @ 25c.	3 00	
Plus 15 per cent on \$3	45	
1 day, double team, @ \$5.50, ...	5 50	
		433 78
		<u>\$543 44</u>

Blue Hill avenue, easterly side, from Washington street about 192 feet southerly. Length, 220 linear feet. Reset edgestone, repave gutters and construct artificial stone sidewalks.

Engineering	\$22 06	
Inspection	24 50	
Engineering expense	1 20	
Advertising	3 90	
Edgestone, 9 feet circular	11 20	
Teaming	3 00	
Amount paid to Robert Eager, Jr., under contract:		
12 linear feet circular edgestone set @ 00c.		
101 linear feet existing edgestone reset @ 10c.	\$10 10	
20 square yards existing granite block paving relaid @ 40c.	8 00	
3,130 square feet artificial stone sidewalks furnished and laid @ 16c.	500 80	
	518 90	
		<u>\$584 76</u>

Centre street, between Green and Keyes streets. Edgestone reset, existing flagging crosswalks relaid, artificial stone sidewalks constructed and roadway paved with bitulithic on a concrete base.

Engineering	\$123 07	
Inspection	245 00	
Engineering expense	3 30	
Labor, handling stock	89	
Advertising	2 10	
Edgestone	31 89	
Teaming	12 00	
Amount paid to Warren Brothers Company, under contract:		
86 linear feet straight edgestone and corners hauled and set @ 24c., ...	\$20 64	
22 linear feet circular edgestone set @ 22c.	4 84	
2,245 linear feet existing edgestone reset @ 19c.	426 55	
7 square yards existing granite block paving relaid, gravel joints, @ 40c.	2 80	
176 square yards existing granite block paving relaid, pitch joints, including concrete base, @ \$1.85	325 60	
4 square yards existing flagging crosswalks relaid, gravel joints, @ 35c.	1 40	
206 square yards existing flagging crosswalks relaid, pitch joints, including concrete base, @ \$1.75	360 50	
<i>Carried forward</i>	\$1,142 33	
		\$418 25

<i>Brought forward</i>	\$1,142 33	\$418 25
4,776 square yards concrete base and bitulithic wearing surface furnished and placed @ \$2.63	12,560 88	
17,816 square feet artificial stone sidewalks furnished and laid @ 20c.	3,563 20	
20 covers reset @ \$3	60 00	
Extra work — Remove concrete base already laid and lay new concrete base to conform to new catch-basin at engine house, Centre street:		
38 square yards old concrete base removed and replaced with new concrete @ \$1	38 00	
Extra work — Omit granite block paving for brows outside of and between tracks and substitute wood block and bitulithic as directed:		
310 square yards wood block pavement furnished and laid @ \$4.18	1,295 80	
1,035 square yards bitulithic wearing surface furnished and laid @ \$2.63	2,722 05	
		21,382 26
		\$21,800 51
Credit: Old blocks, 30,610		612 20
		\$21,188 31
<i>Bernard street</i> , between Harvard and Kerwin streets. Length, 910 linear feet. Area, 3,440 square feet. Set edgestone, pave gutters, relay flagging crosswalks and construct artificial stone sidewalks.		
Engineering		\$37 15
Inspection		59 50
Engineering expense		2 45
Advertising		4 00
Edgestone, 2 small corners		7 20
Amount paid to Thomas F. Hind, Inc., under contract:		
4 cubic yards rock excavation @ \$3	\$12 00	
8 linear feet straight edgestone hauled and set @ 23c.	1 38	
1,542 linear feet existing edgestone reset @ 15c.	231 30	
533 square yards existing granite block paving relaid @ 45c.	239 85	
<i>Carried forward</i>	\$484 53	\$110 30

<i>Brought forward</i>	\$484 53	\$110 30	
3 square yards existing flagging crosswalks relaid @ 50c.	1 50		
1 square yard existing brick sidewalk relaid @ 30c.	30		
11,119 square feet artificial stone sidewalks furnished and laid @ 16c, ...	1,779 04		
81 square feet artificial stone driveways furnished and laid @ 16c, ...	12 96		
3 covers reset @ \$3, ...	9 00		
		2,287 33	
			\$2,397 63

Chelsea South Bridge, from Scott's court to the draw. Length, 347 linear feet. Iron fence reconstructed.

Inspection	\$42 00	
Amount paid to W. A. Snow Iron Works, Inc., under contract:		
Repairing and restoring railing of bridge	506 00	
		\$548 00

Cohasset street, between Corinth and Albano streets. Length, 1,014 linear feet. Area, 9,939 square yards. Edgestone set, block gutters paved and artificial stone sidewalks constructed.

Engineering	\$20 47
Inspection	28 00
Engineering expense	85
Advertising	3 70
Amount paid to Martino DeMatteo, under contract:	
165 linear feet existing edge-stone reset @ 15c.	\$24 75
59 square yards existing granite block paving relaid @ 40c.	23 60
9,939 square feet artificial stone sidewalks furnished and laid @ 16c, ...	1,590 24
2 covers reset @ \$3	6 00
	1,644 59
	\$1,697 61

Condor street, extending sidewalk at foot of Glendon street.

Amount paid to George T. Rendle as per agreement	\$138 00
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Dennis street, between Dudley and Woodville streets. Edgestone set and reset, block gutters paved and repaved, flagging crosswalks relaid and artificial stone sidewalks constructed.

Engineering	\$66 11	
Inspection	47 25	
Advertising	4 40	
Engineering expense	2 60	
Labor, handling stock	2 12	
Blocks, 5,800, old granite	116 00	

Carried forward \$238 48

<i>Brought forward</i>		\$238 48
Edgestone, 141 feet straight and 102 feet 1 inch circular		221 20
Amount paid to James Doherty, under con- tract:		
143 linear feet straight edge- stone and corners hailed and set @ 23c.,	\$32 89	
104 linear feet circular edge- stone set @ 18c. . . .	18 72	
1,596 linear feet existing edge- stone reset @ 14c. . . .	223 44	
220 square yards granite block paving hauled and laid @ 60c.	174 00	
339 square yards existing granite block paving relaid @ 40c.	135 60	
62 square yards existing flag- ging crosswalks relaid @ 50c.	31 00	
8 square yards existing brick sidewalks relaid @ 30c.,	2 40	
9,565 square feet artificial stone sidewalks furnished and laid @ 17c.	1,626 05	
221 square feet artificial stone driveways furnished and laid @ 17c.	37 57	
Extra work—Reset Bradley Head catch- basins to grade where directed:		
21 hours, mason, @ 62½c. . .	13 13	
39 hours, helper, @ 25c. . .	9 75	
Plus 15 per cent on \$22.88,	3 43	
1½ barrels Portland cement @ \$1.85	2 78	
½ double load sand @ \$1.50,	50	
		2,311 26
		\$2,770 94
Credit: 22,000 paving bricks (old)		154 00
		<u>\$2,616 94</u>

Dorchester avenue, from Ralston street about 140 feet southerly. Length,
140 linear feet. Area, 498 square yards. Roadway paved with
wood block on a concrete base, edgestone reset, flagging crosswalks
relaid and brick sidewalks laid.

Engineering	\$10 38
Engineering expense	1 20
Advertising	3 90
Bricks, 2,200, old	15 40
Flagging, 6 feet	4 80
Amount paid to Coleman Brothers, under contract:	
308 linear feet existing edge- stone reset @ 16c.	\$49 28
64 square yards existing granite block paving relaid, gravel joints, @ 60c.	38 40
<i>Carried forward</i>	\$87 68
	\$35 68

<i>Brought forward</i>	\$87 68	\$35 68
8 square yards existing granite block paving relaid, pitch joints, including concrete base, @ \$2	16 00	
13 square yards existing flagging crosswalks relaid, gravel joints, @ \$1	13 00	
1 square yard flagging crosswalks hauled and laid, pitch joints, including concrete base, @ \$2	2 00	
10 square yards existing flagging crosswalks relaid, pitch joints, including concrete base, @ \$1.80,	18 00	
402 square yards wood block pavement furnished and laid @ \$3.90,	1,567 80	
320 square yards existing brick sidewalks relaid @ 35c.	112 00	
2 catch-basins reset @ \$3,	6 00	
		1,822 48
		\$1,858 16
Credit: Old granite blocks		103 00
		<u>\$1,755 16</u>

Dorchester avenue, east side, between Belfort and St. William streets. Length, 174 linear feet. Area, 1,398 square feet. Edgestone set, block gutters paved and artificial stone sidewalks constructed.

Engineering	\$15 52
Inspection	38 50
Engineering expense	95
Advertising	4 60
Edgestone, 9 feet 5 inches circular	11 30
Amount paid to William J. Rafferty Company, under contract:	
10 linear feet circular edgestone set @ 30c.	\$3 00
13 linear feet existing edgestone reset @ 18c.	2 34
3 square yards existing granite block paving relaid @ 50c.	1 50
1,398 square feet artificial stone sidewalks furnished and laid @ 17c.	237 66
	244 50
	<u>\$315 37</u>

Dudley street, between Washington street and Harrison avenue. Length, 380 linear feet. Area, 5,615 square feet. Artificial stone sidewalks constructed.

Engineering	\$42 23
Inspection	52 50
Advertising	4 20
Engineering expense	5 90
<i>Carried forward</i>	\$104 83

<i>Brought forward</i>		\$104 83
Labor, handling stock		39
Edgestone, 35 feet 10 inches		25 08
Amount paid to Robert Eager, Jr., under contract:		
26 linear feet straight edge-stone hauled and set @ 30c.	\$7 80	
102 linear feet existing edge-stone reset @ 15c.	15 30	
5,615 square feet artificial stone sidewalks furnished and laid @ 16c.	898 40	
Extra work — Furnish and lay artificial stone sidewalk and regulate Warren street (westerly side), from Dudley street to Zeigler street:		
237 linear feet existing edge-stone reset @ 15c.	35 55	
1 square yard existing brick sidewalks relaid @ 35c., ...	35	
2,063 square feet artificial stone sidewalks furnished and laid @ 16c.	330 08	
Extra work — Break out and remove concrete as directed:		
2 hours, mason, @ 62½c.	1 25	
6 hours, tender, @ 31¼c.	1 88	
14 hours' labor @ 25c.	3 50	
Plus 15 per cent on \$6.63	99	
		1,295 10
		\$1,425 40
Credit: 10,800 old bricks		75 60
		<u>\$1,349 80</u>

Elmo street, between Blue Hill avenue and Erie street. Length, 800 linear feet. Area, 2,311 square yards. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$68 54
Inspection	71 75
Advertising	4 10
Engineering expense	3 55
Labor, handling stock	2 52
Edgestone, 20 feet 11 inches straight, 5 feet inches circular	17 65
Flagging, 162 feet 10 inches	127 01
Teaming	7 50
Labor, stone cutter	1 50
Blocks	8 00
Amount paid to James Doherty, under contract:	
33 cubic yards rock excavation @ \$5	\$165 00
9 linear feet circular edge-stone set @ 17c.	1 53
<i>Carried forward</i>	\$166 53
	\$312 12

<i>Brought forward</i>	\$166 53	\$312 12
1,091 linear feet existing edge-stone reset @ 13c.	141 83	
505 square yards existing granite block paving relaid @ 40c.	202 00	
33 square yards flagging crosswalks hauled and laid @ 80c.	26 40	
6,248 square feet artificial stone sidewalks furnished and laid @ 17½c.	1,077 78	
68 square feet artificial stone driveways furnished and laid @ 17½c.	11 73	
		1,626 27
		\$1,938 39
Credit: 2 corners		3 60
		<u>\$1,934 79</u>

* *Conway street*, between South and Fairview streets. Length, 802 linear feet. Area, 9,556 square feet. Artificial stone sidewalks constructed, edgestone reset, block paving relaid.

Engineering	\$34 34
Inspection	129 50
Engineering expense	1 35
Advertising	2 10
Handling stock	18
Blocks, old granite, 19,310	386 20
Edgestone, 5 feet 4 inches straight, 31 feet 8 inches circular and 2 small corners	48 02
Amount paid to Martino De Matteo, under contract:	
12 linear feet straight edge-stone and corners hauled and set @ 35c.	\$4 20
26 linear feet circular edge-stone set @ 15c.	3 90
1,534 linear feet existing edge-stone reset @ 13c.	199 42
494 square yards granite block paving hauled and laid @ 70c.	345 80
17 square yards existing granite block paving relaid @ 35c.	5 95
9,392 square feet artificial stone sidewalks furnished and laid @ 17½c.	1,643 60
164 square feet artificial stone driveways furnished and laid @ 19c.	31 16
Extra work — Reset Bradley-Head catch-basin frames where directed @ \$5	15 00
	2,249 03
	<u>\$2,850 72</u>

* See Fairview street, done in connection with this street.

* *Fairview street*, southerly side, from Conway street about 350 feet easterly. Length, 350 linear feet. Area, 2,184 square feet. Artificial stone sidewalks constructed, edgestone reset, block paving relaid.

Advertising		\$2 10	
Amount paid to Martino De Matteo, under contract:			
6 linear feet circular edgestone set @ 15c.	\$0 90		
354 linear feet existing edgestone reset @ 13c.	46 02		
112 square yards granite block paving hauled and laid @ 70c.	78 40		
20 square yards existing granite block paving relaid @ 35c.	7 00		
2,128 square feet artificial stone sidewalks furnished and laid @ 17½c.	372 40		
56 square feet artificial stone driveways furnished and laid @ 19c.	10 64		
Extra work — Reset Bradley-Head catch-basin frames:			
1 catch-basin frame reset @ \$5	5 00		
		520 36	
			<u>\$522 46</u>

Exchange street, from State street about 174 feet northerly. Length, 335 linear feet. Area, 593 square yards. Edgestone reset, roadway paved with wood block on a concrete base in part and balance paved with granite block on a concrete base.

Engineering	\$13 09	
Inspection	50 31	
Engineering expense	45	
Advertising	4 00	
Labor, handling stock	95	
Flagging, 42 feet 9 inches	33 36	
Bricks, 1,000	13 00	
Edgestone, 8 feet 6 inches	5 61	
Amount paid to Central Construction Company, under contract:		
8½ linear feet straight edgestone hauled and set @ 40c.	\$3 40	
153 linear feet existing edgestone reset @ 30c.	45 90	
57 square yards existing granite block paving relaid, pitch joints, @ \$1.49	84 93	
12 square yards flagging crosswalks hauled and laid, pitch joints, @ \$1.75	21 00	
6½ square yards wood block pavement furnished and laid @ \$4.96	32 24	
Carried forward	\$187 47	\$120 77

* See Conway street, done in connection with this street.

<i>Brought forward</i>	\$187 47	\$120 77
2 covers reset @ \$3	6 00	
Extra work — <i>Furnish</i> and lay wood block pavement with lath joints, as directed, be- tween 174 feet north of State street and Dock square:		
236 square yards wood block pavement furnished and laid, lath joints, @ \$5.06	1,194 16	
Extra work — <i>Remove</i> wood blocks for a dis- tance of 160 feet north from State street and substitute granite blocks on a concrete base with pitch and pebble joints:		
288.4 square yards granite block paving laid on a con- crete base with pitch and pebble joints @ \$2.98	859 43	
Allowance for delay under Article 8 of contract:		
5 hours, foreman, @ 65c.	3 25	
60 hours, double team, @ 75c.	45 00	
60 hours' labor @ 25c.	15 00	
8 hours, paver, @ \$1	8 00	
4 hours, rammer, @ 35c.	1 40	
Plus 15 per cent on \$72.65, ...	10 90	
	\$2,330 61	
Deduct because of viola- tion of terms of injunc- tion by officials of city, ...	150 00	
		2,180 61
		\$2,301 38
Credit: Blocks, old granite, 7,975		159 50
		<u>\$2,141 88</u>
<i>Evelyn street</i> , between Blue Hill avenue and Norfolk street. Length, 901 linear feet. Area, 2,603 square yards. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.		
Engineering	\$55 37	
Inspection	115 50	
Engineering expense	1 20	
Advertising	6 20	
Labor, handling stock	83	
Labor, tallying blocks	29 62	
Flagging, 55 feet	44 00	
Blocks, old granite	32 70	
Edgestone, 1,344 feet 10 inches straight, 10 feet 3½ inches circular and 10 small corners, ...	1,093 05	
<i>Carried forward</i>	\$1,378 47	

<i>Brought forward</i>		\$1,378 47
Teaming		2 87
Amount paid to Central Construction Com- pany, under contract:		
Removing trees, bushes, stumps, etc.	\$10 00	
41 cubic yards rock excava- tion @ \$3	123 00	
1,359 linear feet straight edge- stone and corners hailed and set @ 25c.	339 75	
10 linear feet circular edge- stone set @ 25c.	2 50	
49 linear feet existing edge- stone reset @ 25c.	12 25	
467 square yards granite block paving hauled and laid @ \$1	467 00	
14 square yards existing granite block paving re- laid @ 40c.	5 60	
12 square yards flagging crosswalks hauled and laid @ 65c.	7 80	
12 square yards existing flagging crosswalks re- laid @ 40c.	4 80	
8,325 square feet artificial stone sidewalks furnished and laid @ 15c.	1,248 75	
292 square feet artificial stone driveways furnished and laid @ 16c.	46 72	
2 covers reset @ \$3	6 00	
Extra work—Regulate catch-basins over 6 inches:		
4 hours, mason, @ 70c.	2 80	
4 hours, stonecutter, @ 62½c.	2 50	
4 hours, tender, @ 31¼c.	1 25	
Plus 15 per cent on \$6.55	98	
150 bricks @ \$13 per M.	1 95	
2 bags Portland cement @ 50c.	1 00	
		\$2,284 65
Less 1,343 feet 10 inches straight edgestone hailed by city @ 5c.	67 19	
		2,217 46
		<u>\$3,598 80</u>

Evelyn street, between Blue Hill avenue and Norfolk street. Length, 901 linear feet. Area, 2,603 square yards 6-inch tar macadam roadway constructed.

Amount paid to Jeremiah J. McCarthy Company, under contract:	
365 cubic yards earth excavation @ 75c.	\$273 75
76 square yards existing granite block paving relaid @ 50c.	38 00
<i>Carried forward</i>	\$311 75

<i>Brought forward</i>	\$311 75
1,956 square yards tar macadam surface furnished and placed @ 79c.	1,545 24
8 covers reset @ \$3	24 00
	\$1,880 99

Franklin street, easterly side, between Lincoln and Easton streets. Length, 736 linear feet. Area, 4,197 square feet. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$25 59
Inspection	52 50
Engineering expense	55
Advertising	2 15
Labor, handling stock	8 04
Flagging, 31 feet	11 16
Edgestone, 482 feet 5 inches straight, 45 feet 4½ inches circular and 6 small corners	389 05
Amount paid to John J. Lane, under contract:	
456 linear feet straight edgestone hauled and set @ 25c.	\$114 00
47 linear feet circular edgestone set @ 20c.	9 40
178 linear feet existing edgestone reset @ 15c.	26 70
246 square yards existing granite block paving relaid @ 35c.	86 10
7 square yards flagging crosswalks hauled and laid @ \$1	7 00
21 square yards existing flagging crosswalks relaid @ 50c.	10 50
3,978 square feet artificial stone sidewalks furnished and laid @ 16c.	636 48
219 square feet artificial stone driveways furnished and laid @ 16c.	35 04
3 covers reset @ \$3	9 00
	934 22

\$1,423 26

Fullon street, between Richmond and Lewis streets. Length, 525 linear feet. Area, 2,169 square yards. Roadway paved with old granite blocks on a concrete base, edgestone set, flagging crosswalks laid and brick sidewalks relaid.

Engineering	\$65 98
Inspection	126 01
Engineering expense	1 10
Advertising	4 10
Labor, handling stock	3 20
Labor, tallying blocks	8 50
Teaming	39 60
Bricks, 17,000	221 00
Edgestone, 63 feet straight, 18 feet 10 inches circular and 2 small corners	63 81
Flagging, 63 feet 1 inch	113 58

Carried forward \$646 88

<i>Carried forward</i>		\$646 88
Templets		8 59
Blocks, 4,120, old granite		82 40
Amount paid to Boston Paving Company, under contract:		
63 linear feet straight edge- stone and corners hauled and set @ 21c.,	\$13 23	
19 linear feet circular edge- stone set @ 13c.	2 47	
933 linear feet existing edge- stone reset @ 13c.	121 29	
225 square yards existing gran- ite block paving relaid, gravel joints, @ 45c.	101 25	
1,867 square yards existing gran- ite block paving relaid, pitch joints, including concrete base, @ \$1.73,	3,229 91	
39 square yards existing flag- ging crosswalks relaid, gravel joints, @ 50c.	19 50	
36 square yards flagging crosswalks hauled and laid, pitch joints, includ- ing concrete base, @ \$2,	72 00	
2 square yards existing flag- ging crosswalks relaid, pitch joints, including concrete base, @ \$1.73	3 46	
636 square yards existing brick sidewalks relaid @ 29c.,	184 44	
9 covers reset @ \$3	27 00	
Extra work — Perform Sunday work as directed:		
225 square yards existing gran- ite block paving relaid, gravel joints, @ 17c.	38 25	
491 square yards existing gran- ite block paving relaid, pitch joints, @ 30c.	147 30	
39 square yards existing flag- ging crosswalks relaid, gravel joints, @ 17c.	6 63	
Extra work — Repave on existing concrete base where directed:		
23 square yards existing gran- ite block paving relaid, pitch joints, @ 90c.	20 70	
2 square yards existing flag- ging crosswalks relaid, pitch joints, @ 90c.	1 80	
		3,989 23
		<u>\$4,727 10</u>

Germania street, between Boylston and Bismarck streets. Length, 709 linear feet. Area, 1,576 square yards. Rough grade roadway, set edgestone, block gutters paved, flagging crosswalks laid, brick sidewalks relaid

and artificial stone sidewalks constructed, 1,018 square yards tar macadam roadway resurfaced, 7 inches deep.

Engineering	\$90 47
Inspection	105 00
Engineering expense	2 15
Advertising	4 20
Flagging, 296 feet 9 inches	231 46
Blocks, 13,225, old granite	264 50
Edgestone, 1,076 feet straight, 16 small corners and 54 feet 5 inches circular	832 81
Crushed stone, 333.6 tons	383 67
Tarite, 2,758 gallons	227 54
Steam roller	149 00
Labor, handling stock	18 90
Labor, employees, spreading macadam	228 34
Teaming	32 59

Amount paid to John McCourt & Co., under contract:

710 cubic yards earth excavation @ 74c.	\$325 40
71 cubic yards rock excavation @ \$3	213 00
1,100 linear feet straight edgestone and corners hauled and set @ 22c.	242 00
48 linear feet circular edgestone set @ 18c.	8 64
91 linear feet existing edgestone reset @ 16c.	14 56
440 square yards granite block paving hauled and laid @ 75c.	330 00
42 square yards existing granite block paving relaid @ 50c.	21 00
64 square yards flagging crosswalks hauled and laid @ \$1	64 00
10 square yards existing flagging crosswalks relaid @ 75c.	7 50
37 square yards existing brick sidewalks relaid @ 35c., ...	12 95
4,931 square feet artificial stone sidewalks furnished and laid @ 14c.	690 34
128 square feet artificial stone driveways furnished and laid @ 18c.	23 04
	\$2,152 43
Less 15 per cent retained, ...	322 86

1,829 57

\$4,400 20

Greenwood street, between Elmo and Erie streets. Length, 200 linear feet. Edgestone reset, gutters repaved and artificial stone sidewalks constructed.

Engineering	\$3 57
Inspection	3 50
Carried forward	
	\$7 07

<i>Brought forward</i>	\$7 07	
Advertising	4 00	
Engineering expense	20	
Amount paid to James Doherty, under contract:		
66 linear feet existing edge-stone reset @ 17c.	\$11 22	
15 square yards existing granite block paving relaid @ 45c.	6 75	
2,119 square feet artificial stone sidewalks furnished and laid @ 18c.	381 42	
		399 39
		<u>\$410 66</u>

<i>Hancock Street Paving Yard.</i> Wooden steps constructed.		
Engineering	\$24 66	
Inspection	28 00	
Advertising	4 30	
Labor	12 00	
Teaming	10 25	
Amount paid to Thomas H. Hanlon, under contract:		
Building wood steps as per contract	971 00	
		<u>\$1,050 21</u>

<i>Hayward place</i> , between Washington street and Harrison avenue. Length, 268 linear feet. Area, 565 square yards. Concrete base built up and roadway resurfaced with asphalt and bituminous binder.		
Engineering	\$9 76	
Inspection	14 00	
Engineering expense	10	
Advertising	4 00	
Amount paid to Boston Paving Company, under contract:		
65 cubic yards concrete base furnished and laid @ \$8.25	\$536 25	
10 square yards existing granite block paving relaid, pitch joints, @ \$1.15	11 50	
565 square yards bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.05	1,158 25	
1 cover reset @ \$3	3 00	
		1,709 00
		<u>\$1,736 86</u>

<i>Hollander street</i> , from Humboldt avenue about 200 feet westerly. Length, 250 linear feet. Area, 2,254 square feet. Edgestone set, block gutters paved and artificial stone sidewalks constructed:		
Engineering	\$11 63	
Inspection	14 00	
Engineering expense	45	
Edgestone, 12 feet 6 inches circular	15 00	
Labor employees, macadam excavation	509 62	
Labor employees, macadam spreading	186 78	
		<u>\$737 48</u>
<i>Carried forward</i>		

<i>Brought forward</i>	\$737 48
Teaming	217 00
Steam roller, rolling	95 34
Steam roller, picking	12 50
Labor, street cleaning	5 96
Crushed stone, 401.49 tons	461 72
Tarite, 3,001 gallons	247 58

Amount paid to William J. Rafferty Company,
under contract:

13.4 cubic yards rock excavation @ \$5	\$67 00
12 linear feet circular edge-stone set @ 30c.	3 60
331 linear feet existing edge-stone reset @ 18c.	59 58
170 square yards existing granite block paving relaid @ 50c.	85 00
2,254 square feet artificial stone sidewalks furnished and laid @ 17c.	383 18

598 36

\$2,375 94

Howard street, between Gerard and Magazine streets. Length, 427 feet.
Area, 285 square yards. Edgestone set, gutters paved, flagging crosswalks laid and brick sidewalks laid.

Engineering	\$23 24
Inspection	84 00
Engineering expense	1 45
Advertising	4 30
Labor, handling stock	16 33
Edgestone, 895 feet 1 inch straight, 10 small corners, 37 feet 5 inches circular	679 15
Flagging, 150 feet 8 inches	117 52
Bricks, 29,600	384 80
Blocks, 12,550, old granite	251 00

Amount paid to Boston Paving Company,
under contract:

921 linear feet straight edge-stone and corners hauled and set @ 33c.	\$303 93
38 linear feet circular edgestone set @ 20c.	7 60
41 linear feet existing edge-stone reset @ 15c.	6 15
372 square yards granite block paving hauled and laid @ 70c.	260 40
74 square yards existing granite block paving relaid @ 50c.	37 00
32 square yards flagging crosswalks hauled and laid @ \$1	32 00
630 square yards brick sidewalks laid @ 50c.	315 00
16 square yards existing brick sidewalks laid @ 50c.	8 00
4 covers reset @ \$3	12 00

982 08

\$2,543 84

Inwood street, between Olney and Norton streets. Length, 418 linear feet.
Area, 2,000 square feet. Construct artificial stone sidewalks.

Inspection	\$6 69
Engineering expense	60
Advertising	4 00

Amount paid to Connolly & Diamond, under contract:

2,000 square feet artificial stone sidewalks furnished and laid @ 17c.	\$340 00
Extra work — Remove existing artificial stone sidewalk around hydrant and replace with new artificial stone:	
$\frac{1}{2}$ day, finisher, @ \$5	2 50
1 day's labor @ \$2	2 00
$\frac{1}{2}$ day, watchman, @ \$2	1 00
Plus 15 per cent on \$5.50, ...	83
1 $\frac{1}{2}$ barrels cement @ \$1.60	2 40
$\frac{1}{2}$ day, double team, @ \$5.50	2 75
9 cubic feet crushed stone @ 8c.	72
9 cubic feet sand @ 5c.	45
	352 65

\$363 94

L street. Rebuilt cap of bulkhead.

Labor, employees on filling	\$428 14
Labor, employees on bulkhead	38 00
Labor, employees resetting edgestone	17 25
Labor, employees repaving roadway	15 00
Labor, employees, crushed stone walks	15 50
Teaming	66 00
Gravel	1 75
Lumber	37 50
Nails	2 68
Advertising	3 50
Amount paid to Lawler Brothers, building bulkhead:	
Contract price	\$3,773 00
Less amount paid in 1912	1,268 20

2,504 80

Amount paid to Lawler Brothers for repairing cap of bulkhead	300 00
Amount paid to W. H. Ellis, rebuilding cap of bulkhead	595 00

\$4,025 12

Marvin street, between Washington street and Shawmut avenue. Length, 264 linear feet. Area, 576 square yards. Roadway paved with wood block on a concrete base, edgestone set, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$10 27
Inspection	42 00
Engineering expense	65
Advertising	3 43
Labor, handling stock	1 06
Edgestone, 70 feet 5 inches	49 29

Carried forward \$106 70

<i>Brought forward</i>		\$106 70
Amount paid the Boston Paving Company, under contract:		
70 linear feet straight edge-stone hauled and set @ 25c.	\$17 50	
472 linear feet existing edge-stone reset @ 15c.	70 80	
33 square yards existing granite block paving relaid, gravel joints, @ 50c.	16 50	
6 square yards existing granite block paving relaid, pitch joints, including concrete base, @ \$2,	12 00	
14 square yards existing flagging crosswalks relaid, pitch joints, including concrete base, @ \$2,	28 00	
562 square yards wood block pavement furnished and laid @ \$3.69	2,073 78	
6 square yards existing brick sidewalks relaid @ 30c.,	1 80	
2,195 square feet artificial stone sidewalks furnished and laid @ 18c.	395 10	
2 covers reset @ \$3	6 00	
		2,621 48
		\$2,728 18
Credit: Bricks, 1,300, old	\$9 10	
Blocks, 5,750, old	115 00	
		124 10
		<u>\$2,604 08</u>

Massachusetts avenue (westerly side), between New England Railroad Bridge and Columbia road. Length, 2,410 linear feet. Area, 24,713 square feet. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$47 38
Inspection	73 50
Labor, handling stock	1 13
Engineering expense	5 60
Advertising	4 10
Edgestone, 5 feet 3 inches straight, 2 large corners and 31 feet 5 inches circular	53 37
Flagging, 70 feet 8 inches	55 12
Amount paid to James Doherty, under contract:	
242 linear feet existing edge-stone reset @ 14c.	\$33 88
834 square yards existing granite block paving relaid @ 38c.	316 92
15 square yards flagging crosswalks hauled and laid @ 75c.	11 25
24,712 square feet artificial stone sidewalks furnished and laid @ 16c.,	3,953 92
<i>Carried forward</i>	\$4,315 97
	\$240 20

<i>Brought forward</i>	\$4,315 97	\$240 20
8 catch-basin frames reset @ \$3	24 00	
Extra work — Omit the hauling and setting of straight edgestone and substitute the furnish- ing and setting of the same:		
2,010 linear feet straight edge- stone furnished and set @ 90c.	1,809 00	
Extra work — Set cir- cular edgestones and corners where di- rected:		
41 linear feet circular edge- stone and corners set @ 15c.	6 15	
		6,155 12
		\$6,395 32
Credit: Blocks, 4,825, old		96 50
		<u>\$6,298 82</u>

Metropolitan avenue, southerly side, between Washington and Kittredge streets. Edgestone set, block gutters paved and artificial stone sidewalks constructed.

Engineering	\$12 88
Inspection	35 00
Engineering expense	40
Lumber	98 91
Teaming	10 74

Amount paid to West Roxbury Trap Rock Company, under contract:

3½ cubic yards water-box ex- cavation @ \$1	\$3 67
1½ cubic yards rock excava- tion @ \$1	1 33
671 linear feet straight edge- stone hauled and set @ 50c.	335 50
22 linear feet circular edge- stone set @ 25c.	5 50
234 square yards granite block paving hauled and laid @ \$1.45	339 30
4,930 square feet artificial stone sidewalks furnished and laid @ 20c.	986 00

	\$1,671 30
Less amount paid in 1912,	860 67

810 63

	\$968 56
Credit: Edgestone	7 40

\$961 16

Morton street, between Harvard street to Canterbury street. Length, 211 linear feet. Area, 4,523 square yards. Filling from Washington street, Dorchester, and from Sewer Division placed. (Filling unfinished.)

Engineering	\$39 38
Inspection	605 00
Teaming	5 87
Gravel filling, 4,728 cubic yards	3,114 00
Engineering expense	1 10
Labor employees, spreading filling	1,051 75

\$4,817 10

Credit: Blocks, old granite 25 00

\$4,792 10

Milton avenue, between Norfolk and Evans streets. Length, 1,512 linear feet. Area, 16,525 square feet. Trees removed, edgestone set, block gutters paved and artificial stone sidewalks constructed.

Engineering	\$136 07
Inspection	199 50
Engineering expense	4 00
Labor, handling stock	28 83
Flagging, 56 feet 4 inches	45 07

Edgestone, 1,728 feet 5 inches straight, 4 small corners, 89 feet 11 inches circular 1,264 00

Blocks, 24,270 old granite 491 27

Amount paid to Fred S. and A. D. Gore Corporation, under contract:

8 trees removed @ \$23	\$184 00
1,726 linear feet straight edgestone hauled and set @ 23c.	396 98
94 linear feet circular edgestone set @ 13c.	12 22
781 linear feet existing edgestone reset @ 13c.	101 53
590 square yards granite block paving hauled and laid @ 63c.	371 70
262 square yards existing granite block paving relaid @ 43c.	112 66
12 square yards flagging crosswalks hauled and laid @ 95c.	11 40
16,524 square feet artificial stone sidewalks furnished and laid @ 15c.	2,478 60
215 square feet artificial stone driveways furnished and laid @ 15c.	32 25

3,701 34

\$5,870 08

Minot street, between Charlemont and Adams streets. Length, 1,027 linear feet. Area, 12,158 square yards. Edgestone reset, block gutters repaved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$83 29
Inspection	49 00

Carried forward \$132 29

<i>Brought forward</i>	\$132 29
Advertising	4 00
Labor, handling stock	6 67
Flagging, 451 feet 8 inches	359 45
Edgestone, 81 feet 2½ inches	97 45
Engineering expense	2 00

Amount paid to D. M. Biggs

Company, under contract:

82 linear feet circular edge-stone set @ 17c.	\$13 94	
1,843 linear feet existing edge-stone reset @ 13c.	239 59	
694 square yards existing granite block paving relaid @ 40c.	277 60	
98 square yards flagging crosswalks hauled and laid @ 90c.	88 20	
4 square yards existing flagging crosswalks relaid @ 45c.	1 80	
12,080 square feet artificial stone sidewalks furnished and laid @ 16¼c.	1,963 00	
78 square feet artificial stone driveways furnished and laid @ 16¼c.	12 68	
6 covers reset @ \$3	18 00	
Extra work — Remove driveway:		
4 hours, edgestone setter, @ 62½c.	2 50	
12 hours, helper, @ 31¼c.	3 75	
Plus 15 per cent on \$6.25, ...	94	
Extra work — Remove trees, roots, etc., as directed:		
40 hours, foreman, @ 62½c., ...	25 00	
418 hours' labor, @ 25c.	104 50	
Plus 15 per cent on \$129.50	19 43	
16 hours, double team, @ 75c.	12 00	
64 hours' single team, @ 43¼c.	28 00	
4 hours, auto truck, @ \$4, ...	16 00	
7 hours, filling furnished @ \$1.80	12 60	
		2,839 53
		\$3,441 39
Credit: 68 feet edgestone, old		23 80
		\$3,417 59

Minot street, between Neponset avenue and Charlemont street. Length, 2,186 linear feet. Area, 26,603 square yards. Edgestone set and reset, block gutters paved and repaved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$85 92
Inspection	112 00
<i>Carried forward</i>	\$197 92

<i>Brought forward</i>		\$197 92
Engineering expense		2 05
Advertising		4 20
Labor, handling stock		3 60
Edgestone, 15 feet 7 inches circular, 2 small corners		25 90
Flagging, 240 feet 1 inch		192 07
Amount paid to D. M. Biggs Company, under contract:		
30 linear feet circular edge-stone set @ \$1	\$30 00	
4,064 linear feet existing edge-stone reset @ 10c.	406 40	
715 linear feet crushed stone and concrete foundation furnished and laid @ 8c.	57 20	
1,423 square yards existing granite block paving relaid @ 30c.	426 90	
53 square yards flagging crosswalks hauled and laid @ 90c.	47 70	
14 square yards existing flagging crosswalks relaid @ 50c.	7 00	
6 square yards existing brick sidewalks relaid @ 30c.	1 80	
25,123 square feet artificial stone sidewalks furnished and laid @ 16.9c.	4,245 79	
1,480 square feet artificial stone driveways furnished and laid @ 16.9c.	250 12	
2 covers reset @ \$3	6 00	
Extra work — Regulate Bradley-Head catch-basins:		
8 basins regulated @ \$5	40 00	
Extra work — Remove trees and roots where directed:		
66 hours' labor @ 25c.	16 50	
Plus 15 per cent on \$16.50	2 48	
		5,537 89
		<u>\$5,963 63</u>

Nightingale street, northerly side, between Wales street and Talbot avenue. Length, 565 linear feet. Area, 2,892 square feet. Edgestone reset, gutters repaved, flagging crosswalks relaid and artificial stone sidewalks constructed.

Engineering	\$17 99
Inspection	28 00
Engineering expense	75
Advertising	4 00
<i>Carried forward</i>	\$50 74

<i>Brought forward</i>		\$50 74	
Amount paid to Warren Brothers Company, under contract:			
490 linear feet existing edge- stone reset @ 17c.	\$83 30		
173 square yards existing granite block paving re- laid @ 25c.	43 25		
10 square yards existing flagging crosswalks re- laid @ 50c.	5 00		
2,892 square feet artificial stone sidewalks furnished and laid @ 18c.	520 56		
65 square feet artificial stone driveways furnished and laid @ 18c.	11 70		
1 cover reset @ \$3	3 00		
		666 81	
			<u>\$717 55</u>

Park street (westerly side), between Clement and Anawan avenues.
Length, 1,704 linear feet. Area, 8,229 square yards. Edgestone set,
block gutters paved, flagging crosswalks laid and four and one-half
(4½) foot artificial stone sidewalk with loam space constructed between
Anawan and March avenues, and full width artificial stone sidewalk
constructed from March avenue to Centre street.

Engineering	\$40 90	
Inspection	91 00	
Engineering expense	1 35	
Advertising	4 10	
Flagging, 115 feet	89 70	
Edgestone, 1,576 feet 2 inches straight, 31 feet 2 inches circular, 14 small corners	1,128 07	
Labor, handling stock	24 52	
Amount paid to W. A. Murtfeldt Company, under contract:		
1,086 linear feet straight edge- stone and corners hauled and set @ 25c.	\$271 50	
22 linear feet circular edge- stone set @ 15c.	3 30	
7 linear feet existing edge- stone reset.*		
381 square yards existing granite block paving relaid @ 45c.	171 45	
6 square yards flagging crosswalks hauled and laid @ 65c.	3 90	
6 square yards existing flagging crosswalks re- laid @ 45c.	2 70	
5,111 square feet artificial stone sidewalks furnished and laid @ 18c.	919 98	
180 square feet artificial stone driveways furnished and laid @ 19c.	34 20	
<i>Carried forward</i>	\$1,407 03	\$1,379 64

* No price bid for this kind of work.

<i>Brought forward</i>	\$1,407 03	\$1,379 64
207 square yards loam spaces, furnished, placed and seeded @ 30c.	62 10	
Extra work — Haul and set edgestone, relay gut- ters and furnish and lay artificial stone sidewalks in Park street, westerly side, from March avenue to Centre street:		
530 linear feet straight edge- stone and corners hauled and set @ 25c.	132 50	
10 linear feet circular edge- stone set @ 15c.	1 50	
19 linear feet existing edge- stone reset.*		
211 square yards existing granite block paving relaid @ 45c.	94 95	
18 square yards flagging crosswalks hauled and laid @ 65c.	11 70	
3,118 square feet artificial stone sidewalks furnished and laid @ 18c.	561 24	
192 square feet artificial stone driveways furnished and laid @ 19c.	36 48	
Extra work — Place con- crete in front of wooden bulkhead at northerly approach to bridge as directed:		
Placing concrete as di- rected	20 00	
		<u>2,327 50</u>
		\$3,707 14
Credit: Blocks, old granite, 5,988		<u>119 76</u>
		<u>\$3,587 38</u>

Pope's Hill street, between Neponset avenue and Freeport street. Length, 830 linear feet. Area, 3,182 square yards. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$43 39
Inspection	269 50
Engineering expense	2 25
Advertising	4 30
Labor, handling stock	4 79
Edgestone, 381 feet 5 inches, 2 small corners,	263 74
Flagging, 90 feet	70 20
Blocks, 9,425, old granite	188 50
Amount paid to Jeremiah J. McCarthy Com- pany, under contract:	
389 linear feet straight edge- stone and corners hauled and set @ 28c.	<u>\$108 92</u>
<i>Carried forward</i>	\$108 92
	<u>\$846 67</u>

* No price bid for this kind of work.

<i>Brought forward</i>	\$108 92	\$846 67
130 linear feet existing edge-stone reset @ 15c.	19 50	
395 square yards granite block paving hauled and laid @ 75c.	296 25	
125 square yards existing granite block paving relaid @ 50c.	62 50	
20 square yards flagging crosswalks hauled and laid @ \$1	20 00	
16 square yards existing flagging crosswalks relaid @ 50c.	8 00	
2,995 square feet artificial stone sidewalks furnished and laid @ 18c.	538 92	
1 cover reset @ \$3	3 00	
600 square yards crushed stone sidewalks furnished and placed @ 23c.*	138 00	
Extra work — Relay gutters where displaced in making fill:		
1 day, paver, @ \$5	5 00	
1 day, tender, @ \$2.25	2 25	
Plus 15 per cent on \$7.25,	1 09	
		1,203 43
		<u>\$2,050 10</u>
<i>Porter street, from Amory street to Bismarck street.</i> (Work not started.)		
Advertising	\$3 90	
Blocks, 14,825, old granite	271 90	
		\$275 80
Credit: Edgestone	14 35	
		<u>\$261 45</u>
<i>Providence street, 70 feet east of Church street to Berkeley street.</i> (Work done in connection with other work on Providence street.)		
Labor, employees	\$80 28	
Amount paid to Coleman Brothers, under contract	4,103 45	
		<u>\$4,183 73</u>
Rebuilding face of wharf at South End Yard, Albany street.		
Amount paid to Lawler Brothers, under contract:		
Rebuilding face of wharf		<u>\$950 00</u>
Reconstructing stable at Hancock Street Yard, Dorchester.		Bids rejected.
Work not done.		
Advertising		<u>\$7 80</u>
Repairing wall at Fort Hill Wharf.		
Labor, employees	\$86 25	
Cement	12 60	
Sand	6 48	
		<u>\$105 33</u>

* A deduction of 7 cents per yard made on account of condition of walks.

Rosedale street, at numbers 7, 9, 10 and 12. Length, 55 linear feet. Area, 584 square feet. Edgestone set, block gutters paved and artificial stone sidewalks constructed.

Engineering	\$2 28	
Engineering expense	15	
Amount paid to William J. Rafferty Company, under contract:		
98 linear feet existing edgestone reset @ 18c.	\$17 64	
36 square yards existing granite block paving relaid @ 50c., ...	18 00	
585 square feet artificial stone sidewalks furnished and laid @ 17c.	99 45	
54 square feet artificial stone driveways furnished and laid @ 20c.	10 80	
		145 89
		<u>\$148 32</u>

Rose street, between Harrison avenue and Albany street. Length, 483 linear feet. Area, 1,089 square yards. Roadway resurfaced with Taric Compound.

Engineering	\$10 50	
Inspection	7 83	
Amount paid to Independent Coal Tar Com- pany, under contract:		
1,087 square yards Taric Compound furnished and laid @ 60c.	652 20	
		\$670 53

Ruggles street, between Washington street and Shawmut avenue. Length, 459 linear feet. Area, 1,300 square yards. Roadway paved with wood block on a concrete base, edgestone set, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$39 38	
Inspection	49 00	
Engineering expense	2 80	
Advertising	1 44	
Edgestone, 4 feet 7 inches straight, 18 feet 11½ inches circular	25 96	
Amount paid the Boston Paving Company, under contract:		
5 linear feet straight edge- stone hauled and set @ 25c.	\$1 25	
20 linear feet circular edge- stone set @ 19c.	3 80	
625 linear feet existing edge- stone reset @ 15c.	93 75	
55 square yards existing gran- ite block paving relaid, gravel joints, @ 50c.	27 50	
21 square yards existing gran- ite block paving relaid, pitch joints, including concrete base, @ \$2	42 00	
<i>Carried forward</i>	\$168 30	\$118 58

<i>Brought forward</i>	\$168 30	\$118 58
24 square yards existing flagging crosswalks relaid, pitch joints, including concrete base, @ \$2	48 00	
1,276 square yards wood block pavement furnished and laid @ \$3.69	4,708 44	
10 square yards existing brick sidewalks relaid @ 30c., ...	3 00	
4,648 square feet artificial stone sidewalks furnished and laid @ 18c.	836 64	
8 covers reset @ \$3	24 00	
Extra work — Repave and regulate in Shawmut avenue, at approach to Ruggles street:		
275 linear feet existing edgestone reset @ 15c.	41 25	
318 square yards existing granite block paving relaid, gravel joints, @ 50c.	159 00	
166 square yards existing brick sidewalks relaid @ 30c., ...	49 80	
		6,038 43
Credit: Bricks, old	\$137 20	\$6,157 01
Blocks, old granite	367 00	
		504 20
		<u>\$5,652 81</u>

Sleeper street, from Congress street about 650 feet northerly. Length, 626 linear feet. Area, 2,436 square yards. Roadway paved with new granite block on a concrete base, edgestone reset, flagging crosswalks laid and brick sidewalks laid and relaid.

Engineering	\$37 94
Inspection	94 50
Engineering expense	85
Labor, handling stock	56
Edgestone, 37 feet 6 inches	18 03
Bricks	123 50
Advertising	4 00
Amount paid to John E. Quinn, under contract:	
38 linear feet straight edgestone hauled and set @ 40c.	\$15 20
1,166 linear feet existing edgestone reset @ 15c.	174 90
91 square yards existing granite block paving relaid, gravel joints, @ 50c.	45 50
2,283 square yards granite block paving furnished and laid, including concrete base, pitch joints, @ \$3.81	8,698 23
<i>Carried forward</i>	\$8,933 83
	\$279 38

<i>Brought forward</i>	\$8,933 83	\$279 38
25 square yards existing granite block paving relaid, pitch joints, @ 75c.	18 75	
14 square yards flagging crosswalks furnished and laid, pitch joints, including concrete base, @ \$5	70 00	
23 square yards existing flagging crosswalks relaid, pitch joints, @ 50c.	11 50	
160 square yards brick sidewalks laid @ 30c.	48 00	
262 square yards existing brick sidewalks relaid @ 30c., ...	78 60	
7 covers reset @ \$3	21 00	
Extra work — Excavate and remove earth over sewer trench:		
220 loads earth removed @ \$1	220 00	
Extra work — Furnish and lay concrete base where directed in Congress street:		
25 square yards concrete base furnished and laid @ 75c.	18 75	
	\$9,420 43	
Less 2,740 old granite blocks @ 20c.	68 50	
		9,351 93
		\$9,631 31
Credit: Blocks, old granite, 48,410		968 20
		<u>\$8,663 11</u>

South street, between Green and Keyes streets. Edgestone reset, existing flagging crosswalks relaid, artificial stone sidewalks constructed and roadway paved with bitulithic on a concrete base.

Engineering	\$104 84
Inspection	187 25
Engineering expense	2 75
Labor, handling stock	88
Advertising	2 10
Edgestone, 116 feet 6 inches	67 55
Amount paid to Warren Brothers Company, under contract:	
76 linear feet straight edgestone and corners hauled and set @ 24c, ...	\$18 24
35 linear feet circular edgestone set @ 22c.	7 70
2,141 linear feet existing edgestone reset @ 19c.	406 79
67 square yards existing granite block paving relaid, pitch joints, including concrete base, @ \$1.85	123 95
<i>Carried forward</i>	\$556 68
	\$365 37

<i>Brought forward</i>	\$556 68	\$365 37
94 square yards existing flagging crosswalks re- laid, pitch joints, in- cluding concrete base, @ \$1.75	164 50	
4,432 square yards concrete base and bitulithic wearing surface fur- nished and laid @ \$2.63	11,656 16	
16,127 square feet artificial stone sidewalks fur- nished and laid @ 20c.,	3,225 40	
423 square feet artificial stone driveways fur- nished and laid @ 20c.,	84 60	
21 covers reset @ \$3	63 00	
Extra work — Omit granite block paving for brows outside of and between tracks and substitute wood block and bitulithic as directed:		
273 square yards wood block pavement furnished and laid @ \$4.18	1,141 14	
Extra work — Repoint wall on South street:		
1 day, mason, @ \$5	5 00	
2 days, tender, @ \$2	4 00	
Plus 15 per cent on \$9	1 35	
1 bag cement @ 40c.	40	
2 bags sand @ 20c.	40	
		16,902 63
		\$17,268 00
Credit: Blocks, 1 large and 2 small corners	\$6 60	
16 feet flagging	6 40	
31,120 old granite blocks,	622 41	
		635 41
		<u>\$16,632 59</u>

South street, between Robert and Centre streets. Length, 2,560 linear feet.
Area, 24,656 square feet. Edgestone set, block gutters paved, flag-
ging crosswalks laid and artificial stone sidewalks constructed, loam
spaces paved and seeded on northerly side.

Engineering	\$91 38
Inspection	126 00
Engineering expense	1 90
Blocks, 7,300	112 75
Amount paid to Hugh J. McGuire, under contract:	
Removing trees, bushes, stumps, etc.	\$5 75
17 cubic yards subgrading (rock excavation) @ \$2.75	46 75
<i>Carried forward</i>	\$52 50
	\$332 03

<i>Brought forward</i>	\$52 50	\$332 03
3,976 linear feet straight edge-stone furnished and set @ 94c.	3,737 44	
343 linear feet circular edge-stone set @ 14c.	48 02	
341 linear feet existing edge-stone reset @ 12c.	40 92	
380 linear feet crushed stone and concrete foundation furnished and placed @ 15c.	57 00	
1,536 square yards granite block paving hauled and laid @ 94c.	1,443 84	
134 square yards existing granite block paving relaid @ 38c.	50 92	
73 square yards flagging crosswalks furnished and laid @ \$4.75	346 75	
28 square yards existing flagging crosswalks relaid @ 65c.	18 20	
199 square yards crushed stone sidewalks furnished and laid @ 50c., ...	99 50	
23,638 square feet artificial stone sidewalks furnished and laid @ 14 $\frac{3}{4}$ c.	3,486 61	
1,018 square feet artificial stone driveways furnished and laid @ 15c., ...	152 70	
1,037 square yards loam spaces furnished, placed and seeded @ 50c.	518 50	
	\$10,052 90	
Extra work — Excavate buried block at Dimock Street Yard:		
14 days' labor @ \$2.25	31 50	
Plus 15 per cent on \$31.50	4 73	
9 $\frac{1}{2}$ days, double team, @ \$6, ...	57 00	
Extra work — Furnish stonecutter:		
18 $\frac{1}{2}$ hours, stonecutter, @ 70c.	12 95	
Plus 15 per cent on \$12.95	1 94	
	\$10,161 02	
Less amount paid in 1912, ...	7,589 64	
	2,571 38	
		\$2,903 41

Spring street, between Allen and Poplar streets. Length, 203 linear feet. Area, 435 square yards. Roadway paved with bitulithic, edgestone reset and brick sidewalks relaid.

Engineering	\$30 50
Inspection	42 00
<i>Carried forward</i>	\$72 50

<i>Brought forward</i>		\$72 50
Advertising		4 00
Labor, handling stock		1 31
Edgestone, 3 feet 9 inches and 17 feet 2 inches circular		23 22
Bricks, 3,500		24 50
Teaming		9 62
Amount paid to Warren Brothers Company, under contract:		
4 linear feet straight edgestone hailed and set @ 35c.	\$1 40	
18 linear feet circular edgestone set @ 35c.	6 30	
350 linear feet existing edgestone reset @ 30c.	105 00	
416 square yards concrete base and bitulithic wearing sur- face furnished and laid @ \$2.68	1,114 88	
248 square yards existing brick sidewalks relaid @ 25c.	62 00	
2 covers reset @ \$3	6 00	
		\$1,295 58
Extra work — Resurface approach with bitulithic where directed:		
19 square yards bitulithic re- surfacing @ \$1.37	26 03	
		1,321 61
		\$1,456 76
Credit: Blocks, 14,750, old granite		295 00
		<u>\$1,161 76</u>

Summer street, northerly side, between B street and viaduct. Length,
368 linear feet. Concrete retaining wall, bulkhead and fence built.

Engineering		\$63 67
Inspection		187 25
Engineering expense		4 05
Advertising		4 10
Labor, employees, on filling		354 20
Teaming		10 36
Amount paid to McCarthy & Walsh, under contract:		
121 spruce piles furnished and placed @ \$14	\$1,694 00	
356 linear feet concrete wall furnished and placed @ \$14.50	5,162 00	
368 linear feet yellow pine fence furnished and built @ 90c.	331 20	
26 linear feet yellow pine stringers furnished and placed @ \$1	26 00	
Extra work — Excavate extra depth as directed:		
65 cubic yards extra excavation @ \$1.25	81 25	
		7,294 45
		<u>\$7,918 08</u>

St. Alphonsus street, easterly side, between Tremont and Smith streets.
Length, 464 linear feet. Area, 3,059 square feet. Artificial stone
sidewalks were constructed.

Engineering	\$10 28
Inspection	8 75
Engineering expense	15
Advertising	2 10

Amount paid to John McCourt & Co., under
contract:

3,092 square feet artificial stone sidewalks furnished and laid @ 16.9c.	\$522 55	
Extra work — Reset edge- stone at catch-basin and relay sidewalk as di- rected:		
2 hours, edgestone setter, @ 62½c.	1 25	
2 hours, finisher, @ 60c.	1 20	
10 hours' labor @ 25c.	2 50	
Plus 15 per cent on \$4.95	74	
		528 24

\$549 52

Credit: Bricks, 25,700, old 179 90

\$369 62

Tremont street, easterly side, between Winter street and Hamilton place.
Length, 312 linear feet. Area, 3,437 square feet. Artificial stone
sidewalks constructed.

Engineering	\$3 91
Inspection	20 13

Amount paid to Warren Brothers Company,
under contract:

1,827 square feet artificial stone sidewalks furnished and laid @ 29c.	\$529 83	
Extra work — Furnish and lay artificial stone sidewalks between Win- ter and Boylston streets:		
1,610 square feet artificial stone sidewalks furnished and laid @ 29c.	466 90	
		996 73

\$1,020 77

Tremont street, northerly side, from St. Alphonsus street about 350 feet
easterly. Length, 357 linear feet. Area, 3,471 square feet. Artificial
stone sidewalks were constructed.

Engineering	\$14 92
Inspection	8 75
Advertising	2 10

Amount paid to John McCourt & Co., under
contract:

3,471 square feet artificial stone sidewalks fur- nished and laid @ 16.9c.	586 60
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\$612 37

Vernon street, between Washington street and Shawmut avenue. Length,
295 linear feet. Area, 845 square yards. Roadway paved with wood

block on a concrete base, edgestone set, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$16 92
Inspection	42 00
Engineering expense	65
Advertising	1 43
Edgestone, 9 feet 3 inches circular	11 10

Amount paid the Boston Paving Company,
under contract:

9 linear feet circular edge- stone set @ 19c.	\$1 71	
583 linear feet existing edge- stone reset @ 15c.	87 45	
57 square yards existing granite block paving relaid, gravel joints, @ 50c.	28 50	
7 square yards existing granite block paving re- laid, pitch joints, includ- ing concrete base, @ \$2, ...	14 00	
26 square yards existing flagging crosswalks re- laid, pitch joints, includ- ing concrete base, @ \$2, ...	52 00	
819 square yards wood block pavement furnished and laid @ \$3.69	3,022 11	
14 square yards existing brick sidewalks relaid @ 30c., ...	4 20	
3,100 square feet artificial stone sidewalks furnished and laid @ 18c.	558 00	
4 covers reset @ \$3	12 00	
		3,779 97
		\$3,852 07
Credit: Bricks, 8,900, old	\$62 30	
Blocks, 6,250, old granite, ...	125 00	
		187 30
		<u>\$3,664 77</u>

Walnut avenue (easterly side), from Iffley road to beyond Montebello road.
Length, 287 linear feet. Area, 120 square yards. This street was
widened and rough graded.

Engineering	\$59 98
Engineering expense	90
Advertising	4 10

Amount paid to John McCourt & Co., under
contract:

43 cubic yards earth excava- tion @ 75c.	\$32 25
166 cubic yards rock excavation @ \$4	664 00
	696 25

\$761 23

Walnut street, between Franklin and Ericsson streets. Length, 1,576 linear
feet. Area, 4,028 square yards. Edgestone set, block gutters paved
and artificial stone sidewalks constructed.

Engineering	\$75 38
Inspection	157 50
Engineering expense	5 35
Advertising	4 20
Labor, handling stock	23 27
Edgestone, 13.59 feet 2 inches, 8 small corners and 32 feet 11 inches circular	962 55
Flagging, 206 feet	160 68
Blocks, 38,970, old granite	779 57
Amount paid to D. M. Biggs Company, under contract:	

16 cubic yards water-box excavation @ \$1	\$16 00	
1,372 linear feet straight edge- stone and corners hauled and set @ 29c.	397 88	
33 linear feet circular edge- stone set @ 18c.	5 94	
1,710 linear feet existing edge- stone reset @ 14c.	239 40	
1,095 square yards granite block paving hauled and laid @ 79c.	865 05	
35 square yards existing granite block paving relaid @ 40c.	14 00	
45 square yards flagging crosswalks hauled and laid @ 90c.	40 50	
33 square yards existing flagging crosswalks re- laid @ 50c.	16 50	
16,788 square feet artificial stone sidewalks furnished and laid @ 17c.	2,853 96	
216 square feet artificial stone driveways furnished and laid @ 19c.	41 04	
1 cover reset @ \$3	3 00	
Extra Work — Remove tree roots from gut- ters:		
42 hours' labor @ 25c.	10 50	
Plus 15 per cent on \$10.50	1 58	
		4,505 35
		<u><u>\$6,673 85</u></u>

Warren avenue, between Berkeley street and Columbus square. Length, 2,044 linear feet. Area, 12,382 square yards. Roadway paved with wood block on a concrete base, edgestone reset, flagging crosswalks relaid and brick sidewalks relaid.

Engineering	\$157 35
Inspection	469 00
Engineering expense	6 90
Advertising	4 20
Labor, handling stock	7 50
Teaming	33 25
Bricks, 29,000	281 00
Carried forward	\$959 20

<i>Brought forward</i>		\$959 20
Edgestone, 125 feet 5½ inches circular		150 55
Flagging, 4 feet 6 inches		1 80
Amount paid to Boston Paving Company, under contract:		
165 linear feet circular edge- stone set @ 15c.	\$24 75	
3,952 linear feet existing edge- stone reset @ 13c.	513 76	
274 square yards existing granite block paving relaid, gravel joints, @ 43c.	117 82	
77 square yards existing granite block paving relaid, pitch joints, in- cluding concrete base, @ \$1.85	142 45	
31 square yards existing flagging crosswalks, re- laid, gravel joints, @ 43c.	13 33	
108 square yards existing flagging crosswalks re- laid, pitch joints, in- cluding concrete base, @ \$1.85	199 80	
12,382 square yards wood block pavement furnished and laid @ \$3.69	45,689 58	
4,243 square yards existing brick sidewalks relaid @ 30c.	1,272 90	
1 cover reset @ \$3	3 00	
		47,977 39
		\$49,088 94
Credit: Flagging, 709 feet	\$255 42	
Blocks, 46,482, old granite	929 64	
Edgestone, 46 feet 4 inches	16 22	
		1,201 28
		<u>\$47,887 66</u>
<i>Washington street</i> , from Cambridge street across Market street. Length, 1,146 linear feet. Area, 7,795 square yards. Edgestone set, cross- walks laid, artificial stone sidewalks constructed and roadway paved with bitulithic.		
Engineering		\$136 29
Inspection		248 50
Engineering expense		5 15
Advertising		4 10
Labor, handling stock		8 84
Labor, stonecutter		39 00
Edgestone, 64 feet 6 inches, 2 small corners and 121 feet circular		188 88
Flagging, 539 feet		431 20
<i>Carried forward</i>		\$1,061 96

<i>Brought forward</i>		\$1,061 96
Amount paid to Warren Brothers Company, under contract:		
65 linear feet straight edge- stone and corners hailed and set @ 25c.,	\$16 25	
117 linear feet circular edge- stone set @ 22c.	25 74	
1,290 linear feet existing edge- stone reset @ 20c.	258 00	
12 square yards existing granite block paving relaid, gravel joints, @ 42c.	5 04	
180 square yards existing granite block paving relaid, pitch joints, in- cluding concrete base, @ \$1.85	333 00	
111 square yards flagging crosswalks hauled and laid, pitch joints, in- cluding concrete base, @ \$2.20	244 20	
97 square yards existing flagging crosswalks re- laid, pitch joints, in- cluding concrete base, @ \$1.80	174 60	
6,100 square yards concrete base and bitulithic wearing surface fur- nished and laid @ \$2.62	15,982 00	
10 square yards existing brick sidewalks relaid @ 25c.	2 50	
11,526 square feet artificial stone sidewalks fur- nished and laid @ 18c.,	2,074 68	
70 square feet artificial stone driveways fur- nished and laid @ 18c.,	12 60	
30 covers reset @ \$3	90 00	
Extra work — Omit granite block paving for brows outside of and between tracks and substitute wood block and bitulithic as directed:		
1,039 square yards bitulithic pavement furnished and laid @ \$2.62	2,722 18	
256 square yards wood block pavement furnished and laid @ \$4.20	1,075 20	
<i>Carried forward</i>	\$23,015 99	\$1,061 96

<i>Brought forward</i>	\$23,015 99	\$1,061 96
Extra work—Furnish and lay extra concrete on account of change in brows: 36 square yards extra con- crete furnished and laid @ 75c.	27 00	23,042 99
		<u>\$24,104 95</u>
Credit: Blocks, 24,441, old granite	\$488 82	
Flagging, 455 feet 5 inches	163 95	
Edgestone, 55 feet, 1 large and 1 small corner	27 05	679 82
		<u>\$23,425 13</u>
<i>Washington street, West Roxbury, at and near Hyde Park avenue and Tower street. Length, 120 linear feet. Area, 945 square yards. Edgestone set, special granite block paving laid on a concrete base with pitch and pebble joints and brick sidewalks relaid.</i>		
Engineering		\$25 39
Inspection		73 50
Engineering expense		1 90
Advertising		3 80
Labor, handling stock		8 50
Labor, stonecutter		1 50
Teaming		15 00
Edgestone, 38 feet circular		22 83
Flagging, 16 feet		6 40
Amount paid to James Doherty, under con- tract:		
57 linear feet circular edge- stone set @ 17c.	\$9 69	
31 linear feet existing edge- stone reset @ 14c.	4 34	
18 square yards existing granite block paving relaid, gravel joints, @ 50c.	9 00	
848 square yards granite block paving fur- nished and laid, pitch joints, including con- crete base, @ \$4.15	3,519 20	
66 square yards existing granite block paving relaid, pitch joints, in- cluding concrete base, @ \$1.60	105 60	
7 square yards existing granite block paving relaid, pitch joints on existing concrete base.*		
<i>Carried forward</i>	<u>\$3,647 83</u>	<u>\$158 82</u>

* No price bid on this work.

<i>Brought forward</i>	\$3,647 83	\$158 82	
31 square yards existing flagging crosswalks re- laid, pitch joints, in- cluding concrete base, @ \$1.60	49 60		
93 square yards existing brick sidewalks relaid @ 35c.	32 55		
2 covers reset @ \$3	6 00		
Extra work — Cut sewer sheathing:			
1 day's labor @ \$2	2 00		
Plus 15 per cent on \$2 . . .	30		
Extra work — Haul flag- ging as directed:			
1 day, double team, @ \$5.50	5 50		
		3,743 78	
		<u>\$3,902 60</u>	
Credit: Edgestone, 42 feet straight	\$14 70		
Blocks, 2,770, old granite	55 40		
		70 10	
		<u>\$3,832 50</u>	

Washington street (Dorchester), between Blue Hill and Talbot avenues.
Length, 7,645 linear feet. Area, 36,000 square yards. (Work unfin-
ished.) Edgestone reset, roadway being paved with wood block on a
concrete base and artificial stone sidewalks being constructed.

Engineering	\$722 93	
Inspection	926 62	
Engineering expense	15 70	
Teaming	87 62	
Lumber	2 49	
Labor, handling stock	3 10	
Labor, stonecutter	15 00	
Labor, making templets	5 25	
Labor, removing trees	22 00	
Edgestone, 40 feet, 2 small and 6 large corners, 12 feet 6 inches circular	86 50	
Steam roller	22 50	
Amount paid William J. Barry, under con- tract:		
27,861 square yards preparing site @ 20c.	\$5,572 20	
1,065 linear feet straight edge- stone hauled and set @ 21c.	223 65	
281 linear feet circular edge- stone set @ 16c.	44 96	
6,986 linear feet existing edge- stone reset @ 12c.	838 32	
27,861 square yards concrete base furnished and laid @ 65c.	18,109 65	
<i>Carried forward</i>	\$24,788 78	\$1,909 71

<i>Brought forward</i>	\$24,788 78	\$1,909 71
769 square yards existing granite block paving relaid, gravel joints, @ 50c.	384 50	
6 square yards granite block paving hauled and laid, pitch joints, @ \$1.50	9 00	
408 square yards existing granite block paving relaid, pitch joints, @ \$1.20	489 60	
46 square yards existing flagging crosswalks relaid, gravel joints, @ 75c.	34 50	
157 square yards existing flagging crosswalks relaid, pitch joints, @ \$1.20	188 40	
26,110 square yards wood block pavement furnished and laid @ \$2.65	69,191 50	
1,635 square yards nonslipping wood block pavement furnished and laid @ \$3.50	5,722 50	
141 square yards existing brick sidewalks relaid @ 25c.	35 25	
95,575 square feet artificial stone sidewalks furnished and laid @ 14½c.	13,858 38	
3,600 square feet artificial stone driveways furnished and laid @ 18c.	648 18	
Extra work — Haul excavated material to Morton street, between Harvard and Canterbury streets:		
19,936 tons excavated material hauled more than one and one-half miles, and less than two miles, one mile overhaul, per half mile per ton @ 11c.	4,385 92	
Extra work — Furnish man to spread material on Morton street hauled from Washington street:		
125½ days' labor @ \$2	251 00	
<i>Carried forward</i>	\$119,987 51	\$1,909 71

<i>Brought forward</i>	\$119,987 51	\$1,909 71
Plus 15 per cent on \$251, ...	37 65	
	\$120,025 16	
Less 1 per cent retained, ...	1,200 25	
	\$118,824 91	
Less amount paid in 1912, ...	63,749 17	
		55,075 74
		\$56,985 45
Credits: Edgestone, 128 feet 8 inches circular, 25 feet straight, 6 small and 1 large corner	\$99 65	
Blocks, 73,336, old granite	1,466 73	
Flagging, 1,287 feet 9 inches, old	466 98	
		2,033 36
		<u>\$54,952 09</u>

Washington street, between State and Boylston streets. Length, 351 linear feet. Area, 2,720 square feet. Artificial stone sidewalks constructed.

Engineering	\$3 21
Inspection	17 50
Advertising	3 80
Amount paid to Warren Brothers Company, under contract:	
2,720 square feet artificial stone sidewalks furnished and laid @ 29c.	788 80
	<u>\$813 31</u>

Welles avenue, northerly side, from Talbot avenue to opposite Harley street. Length, 600 linear feet. Area, 3,862 square feet. Artificial stone sidewalks constructed.

Engineering	\$17 82
Inspection	12 25
Engineering expense	50
Advertising	4 20
Labor, stonemason	1 50
Teaming	3 00
Blocks	6 00
Amount paid to Robert Eager, Jr., under contract:	
56 linear feet existing edge- stone reset @ 15c.	\$8 40
21 square yards existing granite block paving re- laid @ 30c.	6 30
5 square yards existing flagging crosswalks re- laid @ 50c.	2 50
<i>Carried forward</i>	\$17 20
	\$45 27

<i>Brought forward</i>	\$17 20	\$45 27
3,862 square feet artificial stone sidewalks furnished and laid @ 16c.	617 92	
		635 12
		\$680 39

West First street, between A street and railroad crossing. Length, 420 linear feet. Area, 1,752 square yards. Roadway paved with new granite blocks on a concrete base, with pitch and pebble joints, edge-stone reset, flagging crosswalks relaid and brick sidewalks relaid.

Engineering	\$58 61
Inspection	73 50
Advertising	4 00
Teaming	48
Edgestone, 8 feet 4 inches and 31 feet 6 inches circular	43 63
Bricks, 16,600	199 20
Blocks, 11,055, old granite	221 10

Amount paid to John E. Quinn, under contract:

8 linear feet straight edge- stone hauled and set @ 40c.	\$3 30
32 linear feet circular edge- stone set @ 20c.	6 40
792 linear feet existing edge- stone reset @ 15c.	118 80
236 square yards existing granite block paving re- laid, gravel joints, @ 50c.	118 00
1,463 square yards granite block paving furnished and laid, pitch joints, in- cluding concrete base, @ \$3.85	5,632 55
11 square yards flagging crosswalks furnished and laid, including concrete base, @ \$5	55 00
42 square yards existing flagging crosswalks re- laid, pitch joints, in- cluding concrete base, @ \$1.90	79 80
517 square yards existing brick sidewalks relaid @ 30c.	155 10
12 covers reset @ \$3	36 00
	\$6,204 85
Less 1,458 square yards old granite paving blocks sold to con- tractor @ 50c.	729 00
	5,475 85
	\$6,076 37

Westville street, between Geneva avenue and Draper street. Length, 1,408 linear feet. Area, 4,068 square feet. Reset edgestones, repave gutters, relay flagging crosswalks and construct artificial stone sidewalks.

Engineering	\$48 49
Inspection	105 00
Engineering expense	2 65
Advertising	4 10
Edgestone, 130 feet 4 inches and 1 small corner	79 62
Flagging, 56 feet	43 68
Blocks, 1,100, old granite	22 00
Labor, handling stock	2 29
Amount paid to William J. Rafferty Company, under contract:	
130 linear feet straight edge-stone hauled and set @ 25c.	\$32 50
1,431 linear feet existing edge-stone reset @ 12c.	171 72
47 square yards granite block paving hauled and laid @ 80c.	37 60
690 square yards existing granite block paving relaid @ 38c.	262 20
13 square yards flagging crosswalks hauled and laid @ 75c.	9 75
9,353 square feet artificial stone sidewalks furnished and laid @ 16 $\frac{1}{4}$ c.	1,519 86
209 square feet artificial stone driveways furnished and laid @ 16 $\frac{1}{4}$ c.	33 96
4 covers reset @ \$3	12 00
Extra work — Lay under drains to catch-basins:	
3 hours, mason, @ 62 $\frac{1}{2}$ c.	1 88
Plus 15 per cent on \$1.88	28
12 linear feet drain pipe @ 15c.	1 80
Extra work — Furnish and lay artificial stone sidewalks between Draper and Corwin streets:	
4,251 square feet artificial stone sidewalks furnished and laid @ 16 $\frac{1}{4}$ c.	690 79
42 square feet artificial stone driveways furnished and laid @ 16 $\frac{1}{4}$ c.	6 83
Extra work — Cement joints in existing edgestone, not reset, between Draper and Corwin streets:	
1 day's labor @ \$2	2 00
Plus 15 per cent on \$2	30
2 bags cement @ 50c.	1 00

2,784 47

\$3,092 30

Winthrop street, between Blue Hill and Brook avenues. Length, 332 linear feet. Area, 7,268 square yards. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$23 47	
Inspection	54 25	
Engineering expense	55	
Labor, handling stock	75	
Edgestones, 50 feet 1 inch straight, 18 feet 9 inches circular	57 56	
Blocks, 8,225, old granite	98 70	
Amount paid to James Doherty, under contract:		
48 linear feet straight edge-stone hauled and set @ 23c.	\$11 04	
19 linear feet circular edge-stone set @ 15c.	2 85	
1,057 linear feet existing edge-stone reset @ 11c.	116 27	
256 square yards granite block paving hauled and laid @ 55c.	140 80	
247 square yards existing granite block paving relaid @ 35c.	86 45	
25 square yards existing flagging crosswalks relaid @ 40c.	10 00	
89 square yards existing brick sidewalks relaid @ 30c.	26 70	
7,268 square feet artificial stone sidewalks furnished and laid @ 15c., ...	1,090 20	
		1,484 31
		\$1,719 59
Credit: Bricks, old		32 62
		\$1,686 97

Withington street, between Norfolk and Torrey streets. Length, 652 linear feet. Area, 5,831 square yards of artificial stone sidewalk. Set edgestones, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$29 33	
Inspection	42 00	
Engineering expense	1 30	
Advertising	4 20	
Labor, handling stock	14 01	
Edgestone, 880 feet 9 inches straight, 4 small corners, 110 feet 2 inches circular	603 27	
Flagging, 40 feet 1 inch	31 27	
Blocks, 10,833, old granite	216 66	
Teaming	1 50	
Amount paid to W. A. Murtfeldt Company, under contract:		
894 linear feet straight edge-stone and corners hauled and set @ 24c., ...	\$214 56	
<i>Carried forward</i>	\$214 56	\$943 54

<i>Brought forward</i>	\$214 56	\$943 54
10 linear feet circular edge-stone set @ 26c.	2 60	
107 linear feet existing edge-stone reset @ 10c.	10 70	
292 square yards granite block paving hauled and laid @ 65c.	189 80	
129 square yards existing granite block paving relaid @ 50c.	64 50	
8 square yards flagging crosswalks hauled and laid @ \$1	8 00	
21 square yards existing flagging crosswalks relaid @ 50c.	10 50	
5,831 square feet artificial stone sidewalks furnished and laid @ 18c.	1,049 58	
129 square feet artificial stone driveways furnished and laid @ 18½c.	23 87	
		1,574 11
		\$2,517 65

Woolson street, between Blue Hill avenue and Norfolk street. Length, 1,219 linear feet. Area, 3,522 square yards. Edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$145 60
Inspection	295 75
Engineering expense	2 80
Advertising	6 20
Labor, handling stock	21 80
Edgestone, 1,789 feet 6 inches straight, 2 small corners, 75 feet circular	1,330 28
Blocks, 21,365, old granite	312 38
Flagging, 306 feet	110 16
Steam roller	26 00

Amount paid to Warren Brothers Company, under contract:

Removing trees, bushes, stumps, etc.	\$1 00
1,408 cubic yards earth excavation @ 60c.	844 80
118 cubic yards rock excavation @ \$3.25	383 50
1,810 linear feet straight edge-stone hauled and set @ 18c.	325 80
76 linear feet circular edge-stone set @ 10c.	7 60
36 linear feet existing edge-stone reset @ 10c.	3 60
675 square yards granite block paving hauled and laid @ 70c.	472 50

<i>Carried forward</i>	\$2,038 80	\$2,250 97
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<i>Brought forward</i>	\$2,038 80	\$2,250 97	
108 square yards existing granite block paving relaid @ 50c.	54 00		
64 square yards flagging crosswalks hauled and laid @ 80c.	51 20		
11,598 square feet artificial stone sidewalks furnished and laid @ 15c.	1,739 70		
3 covers reset @ \$3	9 00		
		3,892 70	
Amount paid to Jeremiah J. McCarthy Company, under contract:			
4 square yards existing granite block paving relaid @ 50c.	\$2 00		
2,700 square yards tar macadam surface furnished and placed @ 79c.	2,133 00		
1 cover reset @ \$3	3 00		
	\$2,138 00		
Less 2 days' use of city steam roller @ \$15	30 00		
		2,108 00	
			<u>\$8,251 67</u>

SPECIAL APPROPRIATIONS.

Harvard avenue, Commonwealth avenue to Cambridge street. Set edgestone at corner of Brighton avenue. Contractors work not started.

Engineering	\$373 41
Engineering expense	1 10
Advertising	4 00
Labor, setting edgestone	95 40
Labor, handling stock	2 05
Edgestone, 195 feet 1 inch and 2 small corners,	143 06
Teaming	26 66
	<u>\$645 68</u>

Norfolk street, from Washington street to the railroad. Excavated, edgestone set, roadway in part paved with bitulithic and sidewalks graded. (Work unfinished.)

Advertising	\$4 10
Engineering	1,059 29
Inspection	648 88
Engineering expense	15 80
Labor, making templets	22 00
Labor, stonecutter	22 50
Labor, handling stock	91 59
Labor, erecting signs	5 00
Labor, building fence	8 00
Labor, moving shanty	10 50
Teaming	43 78
Gravel, 5 double loads	7 50
Lumber	8 67
Edgestone, 5,017 feet 4 inches straight, 384	

Carried forward \$1,947 61

<i>Brought forward</i>		\$1,947 61	
feet circular and 12 small corners		3,850 04	
Flagging, 401 feet 4 inches		313 04	
			\$6,110 69
Credit: Blocks, 57,067 old granite and 110 crossing	\$1,155 09		
Edgestone, 3 old large corners	9 00		
		1,164 09	
			<u>\$4,946 60</u>

Old Colony avenue. Construction. Filled and graded from Hyde street toward Mt. Vernon street.

Engineering	\$118 61	
Engineering expense	2 00	
Labor, spreading filling	645 01	
Filling, 2,875 double loads	718 75	
Lumber	1 28	
		<u>\$1,485 65</u>

Pleasant street, between Eliot and Washington streets. This street was widened and paved with wood block on a concrete base, edgestone reset and artificial stone sidewalks constructed. (Work not finished.)

Engineering	\$1,728 92	
Inspection	580 37	
Engineering expense	15 10	
Advertising	26 00	
Labor, handling stock	3 83	
Labor, cutting wall at bridge	22 00	
Engineering, bridge rebuilding	91 16	
Teaming	5 88	
Edgestone, 555 feet 9½ inches straight and 312 feet 3 inches circular	743 27	
Bricks, 2,500	32 50	
Stationery	27 50	
Templets	11 15	

Amount paid to Coleman Brothers, under contract:

480 linear feet straight edgestone hauled and set @ 20c.	\$96 00	
294 linear feet circular edgestone set @ 20c.	58 80	
1,650 linear feet existing edgestone reset @ 13c.	214 50	
75 square yards existing granite block paving relaid, gravel joints, @ 50c.	37 50	
5,400 square yards wood block pavement furnished and laid, including concrete base, @ \$3.70	19,980 00	
100 square yards wood block pavement furnished and laid on existing concrete base @ \$3	300 00	
11,800 square feet artificial stone sidewalks furnished and laid @ 16c., ...	1,888 00	

<i>Carried forward</i>	\$22,574 80	\$3,287 68
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<i>Brought forward</i>	\$22,574 80	\$3,287 68
Less 15 per cent retained,	3,386 22	
		19,188 58
Amount paid to W. A. & H. A. Root, Inc.:		
Contract price, widening bridge	\$4,085 00	
638 pounds supplementary reinforced rods @ 3c.	19 14	
60.4 cubic yards supplementary concrete @ \$7	422 80	
30 square yards supplementary waterproofing @ 65c.	19 50	
72.4 linear feet resetting edge-stone @ 50c.	36 20	
74 hours, redressing edge-stone, @ 75c.	55 50	
60.5 square yards artificial stone sidewalks @ \$1.62	98 01	
Extra work — Building sewer under subway:		
150.5 hours, foreman, @ 79 $\frac{1}{4}$ c.	\$119 72	
704 hours, men, @ 35c.	246 40	
304 hours, men, @ 30c.	91 20	
53 barrels Portland cement @ \$1.85	98 05	
46 tons broken stone @ \$1.50	69 00	
21 cubic yards sand @ \$1.25	26 25	
Water for concrete	5 00	
Use of tools	34 32	
20 days' use of gasoline pump, hose, gasoline and oil @ \$1	20 00	
20 days' use of derrick, chain fall and hopper @ \$1	20 00	
Teaming, 6 trips @ \$3	18 00	
20 pounds oakum @ 3 $\frac{1}{2}$ c.	70	
1,359 feet B. M. boards @ \$10	13 59	
5,000 feet B. M. plank @ \$10	50 00	
	\$812 23	
Plus 15 per cent,	121 83	
	934 06	
		5,670 21
		\$28,146 47
<i>Carried forward</i>		\$28,146 47

<i>Brought forward</i>		\$28,146 47	
Credit: Blocks, 76,600, old granite	\$1,532 00		
Edgestone, 184 feet, old, and 5 large corners, old	79 40		
Flagging, 336 feet 11 inches, old	119 49		
		<u>1,730 89</u>	
			<u>\$26,415 58</u>

<i>Thatcher street extension, Hyde Park. Graded. (Work unfinished.)</i>			
Labor, excavating	\$10 00		
Labor, filling	19 34		
Labor, drilling and blasting	113 83		
Labor, clearing and cutting trees	37 50		
			<u>\$180 67</u>

<i>Tunnel under railroad tracks, between Boylston and Green streets, Jamaica Plain. (Lawndale Terrace.)</i>			
Engineering	\$607 18		
Inspection	115 04		
Engineering expense	10 15		
Amount paid to James D. Kelly, under contract:			
Contract price	\$5,800 00		
9.6 cubic yards rock excavation @ \$4	38 40		
	<u>\$5,838 40</u>		
Extra work done under order dated December 18, 1912	1,000 00		
Extra work done under order dated March 1, 1913	82 60		
	<u>\$6,921 00</u>		
Deduct for liquidated damages, 4 days @ \$25	100 00		
	<u>\$6,821 00</u>		
Amount paid in 1912	1,086 64		
		<u>5,734 36</u>	
Amount paid to N. Y., N. H. & H. R. R. Co. for amount agreed upon for labor and material account of false work	\$5,600 00		
For labor and material used in building fence, account of Lawndale terrace subway	160 82		
		<u>5,760 82</u>	
			<u>\$12,227 55</u>

<i>Union Park street, between Washington street and Harrison avenue. Length, 227 linear feet. Area, 2,720 square yards. This street was widened, edgestone set, flagging crosswalks laid, asphalt pavement laid and artificial stone sidewalks constructed.</i>			
Engineering	\$116 34		
Inspection	105 00		
<i>Carried forward</i>	\$221 34		

<i>Brought forward</i>		\$221 34
Engineering expense		15 07
Advertising		4 10
Labor, handling stock		6 60
Templets		8 27
Teaming		5 30
Edgestone, 273 feet 2 inches straight, 292 feet 3 inches circular and 2 large corners		313 97
Flagging, 4 feet 2 inches		3 33
Amount paid to Fred S. & A. D. Gore Corpora- tion, under contract:		
273 linear feet straight edge- stone hauled and set @ 19c.	\$51 87	
98 linear feet circular edge- stone set @ 15c.	14 70	
644 linear feet existing edge- stone reset @ 15c.	96 60	
193 square yards existing granite block paving relaid, gravel joints, @ 50c.	96 50	
23 square yards existing granite block paving relaid, pitch joints, @ 95c.	21 85	
8 square yards existing flag- ging crosswalks relaid, gravel joints, @ 50c.	4 00	
24 square yards flagging crosswalks hauled and laid, pitch joints, in- cluding concrete base, @ \$2.25	54 00	
2,410 square yards concrete base bituminous con- crete binder and as- phalt wearing surface furnished and laid @ \$2.57	6,193 70	
50 square yards bituminous concrete binder and as- phalt wearing surface furnished and laid @ \$1.85	92 50	
29 square yards existing brick sidewalks relaid @ 50c.	14 50	
10,115 square feet artificial stone sidewalks furnished and laid @ 15½c.	1,567 83	
12 square yards wood block pavement furnished and laid @ \$3.75	45 00	
Extra work — Furnish and lay extra bitumi- nous binder where di- rected:		
2 cubic yards extra bitumi- nous binder furnished and laid @ \$11	22 00	
<i>Carried forward</i>	\$8,275 05	\$577 98

<i>Brought forward</i>	\$8,275 05	\$577 98	
Extra work — Shift and dress edgestone as di- rected:			
5½ hours, stonecutter, @ 62½c.	3 44		
1 hour, paver, @ 62½c. . . .	63		
3 hours' labor @ 25c.	75		
Plus 15 per cent on \$4.82,	72		
	\$8,280 59		
Less 5 feet 1 inch circular edgestone broken by contractor @ \$1.20	6 10		
		8,274 49	
			<u>\$8,852 47</u>

STREETS CONSTRUCTED OR IN THE PROCESS
OF CONSTRUCTION UNDER CHAPTER 393
OF THE ACTS OF 1906, AND THE COST
CHARGED TO THE APPROPRIATION FOR
HIGHWAYS, MAKING OF.

Appian way, between Franklin and Raymond streets. Length, 426 linear feet. Area, 807 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$108 44	
Inspection	122 50	
Engineering expense	2 00	
Advertising	5 96	
Labor, handling stock	13 89	
Edgestone, 817 feet 8 inches straight, 2 large corners, 44 feet 8½ inches circular	605 96	
Flagging, 89 feet 11 inches	70 14	
Blocks, 8,820, old granite	176 40	
Amount paid to John J. Lane, under contract:		
Removing trees, bushes, stumps, etc.	\$0 01	
447 cubic yards earth excava- tion @ 50c.	223 50	
828 linear feet straight edge- stone and corners hauled and set @ 35c., ...	289 80	
45 linear feet circular edge- stone set @ 15c.	6 75	
6 linear feet existing edge- stone reset @ 1c.	6	
243 square yards granite block paving hauled and laid @ 75c.	182 25	
20 square yards existing gran- ite block paving relaid @ 1c.	20	
18 square yards flagging crosswalks hauled and laid @ \$1	18 00	
506 square yards tar macadam surface furnished and placed @ 90c.	455 40	
3,312 square feet artificial stone sidewalks furnished and laid @ 16c.	529 92	
3 covers reset @ \$3	9 00	
	1,714 89	
		<u>\$2,820 18</u>

Arlington street, from Boylston street to Columbus avenue. (Unfinished work from 1912.)

Engineering	\$13 00
Engineering expense	30
<i>Carried forward</i>	\$13 30

<i>Brought forward</i>	\$13 30
Edgestone, 55 feet	38 50
Gravel, 49 double loads and 52½ tons	110 60
Teaming	155 93

\$318 33

Armington street, between Webster street and Brighton avenue. (Not completed.) Length, 570 linear feet. Area, 1,263 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed. (Walks unfinished.)

Engineering	\$128 91
Inspection	52 50
Engineering expense	1 75
Advertising	8 13
Edgestone, 1,052 feet 7 inches straight, 2 small corners, 36 feet 1 inch circular	786 63
Flagging, 135 feet	105 30
Blocks, 400, old granite	8 00
Labor, handling stock	20 58

Amount paid to A. J. & G. H. McMurtry,
under contract:

Preparing site	\$3 00
500 cubic yards earth excavation @ 60c.	300 00
1,034 linear feet straight edgestone and corners hailed and set @ 15c.	155 10
24 linear feet circular edgestone set @ 10c.	2 40
59 linear feet existing edgestone reset @ 5c., ...	2 95
28 square yards granite block paving hauled and laid @ 55c.	15 40
29 square yards flagging crosswalks hauled and laid @ 60c.	17 40
1,207 square yards tar macadam surface furnished and placed @ 65c.	784 55
4,400 square feet artificial stone sidewalks furnished and laid (unfinished) @ 7c., ...	308 00
2 covers reset @ \$3	6 00

\$1,594 80

Less amount retained

239 22

1,355 58

\$2,467 38

Audubon road, between Ivy and Mountfort streets. Length, 346 linear feet. Area, 1,663 square yards. Six-inch asphalt macadam roadway constructed, edgestone set, block gutters paved and artificial stone sidewalks laid.

Engineering	\$176 83
Inspection	115 50
Engineering expense	2 55
Advertising	5 57
Labor, handling stock	3 03

Carried forward \$303 48

<i>Brought forward</i>	\$303 48
Flagging, 205 feet 5 inches	160 23
Edgestone, 156 feet 8 inches straight, 183 feet circular, 4 large corners	353 27
Blocks, 7,700, old granite	154 00
	\$970 98
Credit: 57 feet 4 inches old circular edgestone	34 40
	<u>\$936 58</u>

No payment made on contract.

<i>B street</i> , from Fargo street to Congress street. Work done in 1912.	
Engineering expense	\$0 70
Bricks, 38,784	503 94
	<u>\$504 64</u>

<i>Ballou avenue</i> , from Woodrow avenue to Willowwood street. (Work not started.)	
Engineering	\$207 39
Engineering expense	1 00
Advertising	7 83
Teaming	99 60
Blocks, 42,450, old granite	849 00
	<u>\$1,164 82</u>

Barrymore street, between Blue Hill avenue and Harvard street. Length, 271 linear feet. Area, 783 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$58 92
Inspection	199 50
Engineering expense	1 85
Labor, handling stock	9 60
Teaming	8 80
Edgestone, 530 feet 1 inch straight, 38 feet 11 inches circular, 2 small corners	424 25
Flagging, 110 feet	88 00
Blocks, 7,470, old granite	151 42

Amount paid to Fred S. & A. D. Gore Corporation, under contract:

Removing trees, bushes, stumps, etc.	\$1 00
358 cubic yards earth excavation @ 73c.	261 34
4½ cubic yards rock excavation @ \$3.25	14 63
532 linear feet straight edgestone hauled and set @ 21c.	111 72
46 linear feet circular edgestone set @ 13c.	5 98
185 square yards granite block paving hauled and laid @ 65c.	120 25
22 square yards existing granite block paving relaid @ 43c.	9 46

<i>Carried forward</i>	\$524 38	\$942 34
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<i>Brought forward</i>	\$524 38	\$942 34
23 square yards flagging crosswalks relaid @ 43c.,	9 89	
567 square yards macadam surface furnished and placed @ 69c.	391 23	
3,511 square feet artificial stone sidewalks furnished and laid @ 13c.	456 43	
3 covers reset @ \$3	9 00	
		1,390 93
		<u>\$2,333 27</u>

Bentham road, between Draper street and Robinson avenue. Length, 270 linear feet. Area, 720 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid, artificial stone sidewalks constructed.

Engineering	\$54 10
Inspection	94 50
Engineering expense	1 80
Labor, handling stock	8 70
Edgestone, 511 feet 6 inches straight, 46 feet 8½ inches circular	399 70
Flagging, 100 feet 1 inch	80 07
Blocks, 7,750, old granite	93 00
Amount paid to James Doherty, under contract:	
Removing trees, bushes, etc.	\$5 00
290 cubic yards earth excava- tion @ 50c.	145 00
518 linear feet straight edge- stone hauled and set @ 20c.	103 60
40 linear feet circular edge- stone set @ 15c.	6 00
4 linear feet existing edge- stone reset @ 12c.	48
260 linear feet crushed stone and concrete founda- tion furnished and laid @ 15c.	39 00
197 square yards granite block paving hauled and laid @ 65c.	128 05
4 square yards existing gran- ite block paving relaid @ 40c.	1 60
21 square yards flagging crosswalks hauled and laid @ 72c.	15 12
516 square yards tar macadam surface furnished and placed @ 82c.	423 12
162 square feet artificial stone sidewalks furnished and laid @ 13c.	21 06
2 covers reset @ \$3	6 00
191 square yards loam spaces placed and seeded @ 10c.	19 10
<i>Carried forward</i>	\$913 13

\$731 87

<i>Brought forward</i>	\$913 13	\$731 87
10.7 cubic yards loam furnished @ \$1.10	11 77	
		924 90
		\$1,656 77

<i>Binney street</i> , Longwood avenue to Francis street. Work not started.		
Engineering	\$110 85	
Engineering expense	90	
Advertising	6 17	
		\$117 92

Brainerd road, between Harvard avenue and Warren street. Length, 1,816 linear feet. Area, 6,480 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$238 64
Inspection	315 00
Engineering expense	4 80
Labor, handling stock	49 58
Teaming	1 44
Edgestone, 3,362 feet 2 inches straight, 6 small corners, 145 feet 7½ inches circular	2,455 36
Flagging, 730 feet 10 inches	584 67
Blocks, 4,492 new and 45,329 old granite	1,221 02
Amount paid to James Doherty, under contract:	

Removing trees, bushes, stumps, etc.	\$5 00
2,373 cubic yards earth ex- cavation @ 45c.	1,067 85
4 cubic yards rock excava- tion @ \$3	12 00
3,311 linear feet straight edgestone hauled and set @ 19c.	629 09
166 linear feet circular edgestone set @ 13c., ...	21 58
136 linear feet existing edgestone reset @ 13c.	17 68
1,280 square yards granite block paving hauled and laid @ 67c.	857 60
63 square yards existing granite block paving relaid @ 37c.	23 31
158 square yards flagging crosswalks hauled and laid @ 79c.	124 82
6 square yards existing flagging crosswalks relaid @ 40c.	2 40
4,973 square yards tar maca- dam surface furnished and placed @ 81c.	4,028 13
21,642 square feet artificial stone sidewalks furn- ished and laid @ 13c.	2,813 46
25 covers reset @ \$3	75 00
<i>Carried forward</i>	\$9,677 92
	\$4,870 51

<i>Brought forward</i>	\$9,677 92	\$4,870 51	
Extra work — Remove unsuitable material below subgrade:			
36 hours' labor @ 25c.	9 00		
Plus 15 per cent on \$9, ...	1 35		
$\frac{1}{2}$ day, single team, @ \$3.50	1 75		
		9,690 02	
			<u>\$14,560 53</u>

Brookdale street, from Florence street to Sycamore street. (Work not started.)

Engineering	\$82 48	
Engineering expense	50	
		<u>\$82 98</u>

Brookview street, between Blue Hill avenue and Harvard street. Length, 533 linear feet. Area, 2,014 square yards. 6-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid, and artificial stone sidewalks constructed.

Engineering	\$92 18
Inspection	101 50
Engineering expense	2 15
Labor, handling stock	15 29
Edgestone, 1,010 feet straight and 18 feet 9 inches circular	708 90
Flagging, 139 feet 8 inches	110 94
Blocks, 11,885, old granite	248 96

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$5 00
869 cubic yards earth excavation @ 50c.	434 50
$4\frac{1}{2}$ cubic yards rock excavation @ \$3	13 50
1,020 linear feet straight edgestone hauled and set @ 20c.	204 00
19 linear feet circular edgestone set @ 13c.	2 47
20 linear feet existing edgestone reset @ 13c.	2 60
365 square yards granite block paving hauled and laid @ 70c.	255 50
27 square yards existing granite block paving relaid @ 35c.	9 45
30 square yards flagging crosswalks hauled and laid @ 81c.	24 30
1,635 square yards tar macadam surface furnished and placed @ 81c.	1,324 35
5,273 square feet artificial stone sidewalks furnished and laid @ 13c.	685 49
6 covers reset @ \$3	18 00

<i>Carried forward</i>	\$2,979 16	\$1,279 92
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<i>Brought forward</i>	\$2,979 16	\$1,279 92
Extra work — Omit artificial stone sidewalks where directed and furnish, place and seed loam spaces:		
257 square yards loam spaces furnished, placed and seeded, @ 45c.	115 65	
18 hours' labor (removing cinders) @ 25c.	4 50	
Plus 15 per cent on \$4.50	68	
1 day, double team, @ \$5.50,	5 50	
Extra work — Haul surplus excavation to Dumas street:		
382 tons material hauled to Dumas street, one-half mile overhaul, per half mile, per ton (Section 1, Article E), @ 11c.	42 02	
	\$3,147 51	
Less amount charged to Dumas street	42 02	
		3,105 49
		<u>\$4,385 41</u>

Bynner street, between South Huntington avenue and Day street. Length, 716 linear feet. Area, 2,116 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$170 64
Inspection	141 00
Engineering expense	3 75
Advertising	7 01
Labor, handling stock	20 09
Blocks, 19,200 old granite	374 82
Flagging, 83 feet	66 14
Edgestone, 1,249 feet 4 inches straight, 44 feet 9 inches circular, and 2 small corners	885 46

Amount paid to J. C. Coleman & Sons Company, under contract:

Removing trees, bushes, stumps, etc.	\$1 00
962 cubic yards earth excavation @ 70c.	673 40
50 cubic yards rock excavation @ \$4	200 00
1,241 linear feet straight edgestone hauled and set @ 30c.	372 30
45 linear feet circular edgestone set @ 20c.	9 00
201 linear feet existing edgestone reset @ 15c.	30 15
439 square yards granite block paving hauled and laid @ 80c.	351 20

<i>Carried forward</i>	\$1,637 05	\$1,668 91
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<i>Brought forward</i>	\$1,637 05	\$1,668 91
112 square yards existing granite block paving relaid @ 50c.	56 00	
18 square yards flagging crosswalks hauled and laid @ \$1	18 00	
40 square yards existing flagging crosswalks relaid @ 50c.	20 00	
1,586 square yards tar macadam surface furnished and placed @ 80c.	1,268 80	
9,023 square feet artificial stone sidewalks furnished and laid @ 15c.	1,353 45	
4 covers reset @ \$3	12 00	
Extra work — Cut concrete from in front of poles in edgestone trench:		
3 days' labor @ \$2	6 00	
Plus 15 per cent on \$6	90	
Extra work — Cut guttermouths where directed and replace round basin covers with new covers furnished by Sewer Service:		
2 days, stonecutter, @ \$4.80	9 60	
1 day, mason, @ \$5.60	5 60	
2 days, helper, @ \$2.50	5 00	
Plus 15 per cent on \$20.20	3 03	
		4,395 43
		<u>\$6,064 34</u>

Calumet street, between Parker Hill avenue and Hillside street (unfinished). Length, 1,201 linear feet. Area, 4,336 square yards. (Work unfinished.) Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$332 82
Inspection	231 00
Engineering expenses	5 90
Labor, handling stock	32 69
Advertising	6 81
Flagging, 440 feet 9 inches	343 78
Edgestone, 1,765 feet straight, 621 feet 8 inches circular	1,891 16
Blocks, 39,810 old granite	712 26
Amount paid to James Doherty, under contract:	
Removing trees, bushes, stumps, etc.	\$5 00
2,000 cubic yards earth excavation @ 87c.	1,740 00
43 cubic yards water-box excavation @ \$1	43 00
<i>Carried forward</i>	\$1,788 00
	<u>\$3,556 42</u>

<i>Brought forward</i>	\$1,788 00	\$3,556 42
2 cubic yards rock excavation @ \$4	8 00	
1,700 linear feet straight edge-stone and corners hauled and set @ 23c., ...	391 00	
600 linear feet circular edge-stone set @ 15c.	90 00	
80 linear feet existing edge-stone reset @ 14c.	11 20	
50 linear feet crushed stone and concrete foundation furnished and placed @ 15c.	7 50	
870 square yards granite block paving hauled and laid @ 65c.	565 50	
20 square yards existing granite block paving relaid @ 45c.	9 00	
95 square yards flagging crosswalks hauled and laid @ 85c.	80 75	
5 square yards existing crosswalks relaid @ 50c.	2 50	
2,850 square yards tar macadam surface furnished and placed @ 87c.	2,479 50	
26 square yards existing brick sidewalks relaid @ 30c.	7 80	
13,500 square feet artificial stone sidewalks furnished and laid @ 15c.	2,025 00	
11 covers reset @ \$3	33 00	
250 linear feet ground water drain furnished and laid @ 46c.	115 00	
	<u>\$7,613 75</u>	
Less 15 per cent retained	<u>1,142 06</u>	
		<u>6,471 69</u>
		<u>\$10,028 11</u>

Church street, between Boylston and Providence streets. Length, 150 linear feet. Area, 440 square yards. Roadway paved with wood block on a concrete base and artificial stone sidewalks were constructed.

Engineering	\$46 69
Inspection	24 50
Engineering expense	95
Advertising	3 90
Blocks, 20,000 *	980 00
Gravel, 36 double loads	50 40
Teaming	45 20
<i>Carried forward</i>	<u>\$1,151 64</u>

* These blocks will not be used and account will be credited in 1914.

<i>Brought forward</i>		\$1,151 64	
Amount paid to Coleman Brothers, under contract:			
440 square yards wood block pavement furnished and laid @ \$3.90	\$1,716 00		
1,614 square feet artificial stone sidewalks furnished and laid @ 17c.	274 38		
		1,990 38	
		<u>\$3,142 02</u>	
Credit: Blocks, 11,200, old granite	\$224 00		
Bricks, 4,300, old	30 10		
		254 10	
		<u>\$2,887 92</u>	
<i>Chestnut street, Brimmer street to Charles River Embankment. (Work not started.)</i>			
Engineering		\$60 60	
Engineering expense		10	
		<u>\$60 70</u>	
<i>Clement avenue, Anawan avenue to Clement avenue. (Work not started.)</i>			
Engineering		\$41 34	
<i>Clement avenue, Meredith street to Clement avenue. (Work not started.)</i>			
Engineering		\$41 34	
<i>Clement avenue, between Stratford and Park streets. Length, 437 linear feet. Area, 1,309 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.</i>			
Engineering		\$52 67	
Inspection		141 75	
Engineering expense		1 15	
Advertising		6 76	
Labor, handling stock		12 47	
Blocks, 4,500, old granite		90 00	
Edgestone, 762 feet 2 inches straight, 6 small corners, 65 feet circular		577 66	
Flagging, 60 feet 11 inches		21 93	
Steam roller		3 25	
Amount paid to Thomas F. Minton, under contract:			
Removing trees, bushes, stumps, etc.	\$10 00		
315 cubic yards subgrading (earth excavation) @ 50c.	157 50		
9 cubic yards water-box excavation @ \$1	9 00		
1½ cubic yards rock excavation @ \$2	3 00		
779 linear feet straight edgestone and corners hauled and set @ 28c.	218 12		
<i>Carried forward</i>	\$397 62	\$907 64	

<i>Brought forward</i>	\$397 62	\$907 64
65 linear feet circular edge-stone set @ 25c.	16 25	
280 square yards granite block paving hauled and laid @ \$1.15	322 00	
37 square yards existing granite block paving relaid @ 45c.	16 65	
13 square yards flagging crosswalks hauled and laid @ \$1	13 00	
14 square yards existing flagging crosswalks relaid @ 50c.	7 00	
1,055 square yards tar macadam surface furnished and placed @ 77c.	812 35	
5,880 square feet artificial stone sidewalks furnished and laid @ 16c.	860 80	
179 square feet artificial stone driveways furnished and laid @ 17c.	30 43	
2 covers reset @ \$3	6 00	
	\$2,482 10	
Less $\frac{1}{4}$ day steam roller @ \$15	3 75	
		2,478 35
		\$3,385 99

Clermont street, from Bailey street to Fuller street. (Work not started.)

Engineering	\$42 35
Engineering expense	50
Advertising	7 93
	\$50 78

Cliftondale street, between Kittredge street and Norfolk streets. Length, 951 linear feet. Area, 2,747 square yards, 6-inch Bermudez asphalt macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$166 69
Inspection	252 00
Engineering expense	2 70
Advertising	4 00
Labor, handling stock	30 27
Blocks, 23,950, old granite	479 00
Flagging, 226 feet 3 inches	176 47
Edgestone, 1,786 feet 9 inches straight, 82 feet 3 inches circular, 11 small corners	1,323 64
Amount paid to Thomas F. Minton, under contract:	
12 trees removed @ \$10	\$120 00
2,269 cubic yards earth excavation @ 65c.	1,474 85
10 cubic yards water-box excavation @ \$1	10 00
26 cubic yards rock excavation @ \$2	52 00
<i>Carried forward</i>	\$1,656 85
	\$2,434 77

<i>Brought forward</i>	\$1,656 85	\$2,434 77
1,804 linear feet straight edge-stone and corners hauled and set @ 28c.,	505 12	
83 linear feet circular edge-stone set @ 25c.	20 75	
672 square yards granite block paving hauled and laid @ \$1.15	772 80	
29 square yards existing granite block paving relaid @ 45c.	13 05	
49 square yards flagging crosswalks hauled and laid @ \$1.50	73 50	
22 square yards existing flagging crosswalks relaid @ 75c.	16 50	
1,968 square yards asphalt macadam surface furnished and placed @ \$1.05	2,066 40	
12,079 square feet artificial stone sidewalks furnished and laid @ 16c.,	1,932 64	
365 square feet artificial stone driveways furnished and laid @ 16c.,	58 40	
12 covers reset @ \$3	36 00	
Extra work — Raise manhole covers over 6 inches:		
2 manhole covers raised over 6 inches @ \$6	12 00	
Extra work — Construct driveways not shown on plan:		
1½ days, stone cutter, @ \$4.80	9 00	
½ day's labor @ \$2	1 00	
Plus 15 per cent on \$10,	1 50	
½ day, double team, @ \$6,	3 00	
		7,178 51
		<u><u>\$9,613 28</u></u>

Colonial avenue, from Talbot avenue to New England avenue. (Work not started.)

Engineering	\$103 22
Engineering expense	1 00
Advertising	5 37
Blocks, 16,475, old granite	260 10
	<u><u>\$369 69</u></u>

Cottage street, from Gove street to Porter street. (Work not started.)

Engineering	\$61 68
Engineering expense	78
Advertising	3 58
	<u><u>\$66 04</u></u>

Crossman street, between Norfolk street and West Selden street. Length, 696 linear feet. Area, 2,125 square feet. Roadway excavated, edgestone set and gutters paved. (Street not finished.)

Engineering	\$219 71
Inspection	129 50
Engineering expense	4 55
Advertising	6 76
Labor, handling stock	30 35
Flagging, 260 feet 1 inch	202 86
Edgestone, 1,100 feet 2 inches straight, 174 feet 6 inches circular, 4 small corners	947 91
Blocks, 19,750, old granite	395 00
Repairing iron fence	15 60

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$25 00
350 cubic yards earth excavation @ 65c.	227 50
1,000 linear feet straight edgestone and corners hauled and set @ 23c., ...	230 00
100 linear feet circular edgestone set @ 15c.	15 00
300 square yards granite block paving hauled and laid @ 75c.	225 00

\$722 50

Less 15 per cent retained

108 38

614 12

\$2,566 36

Dalrymple street, between Eggleston and Boylston streets. (Work done in 1912.) Length, 784 linear feet. Area, 2,265 square yards. Constructed 6-inch tar macadam roadway, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering \$2 50

Amount paid to John Kelly Company, under contract:

Removing trees, bushes, stumps, etc.	\$1 00
1,169 cubic yards subgrading (earth excavation) @ 60c.	701 40
11½ cubic yards subgrading (rock excavation) @ \$1.75	20 13
999 linear feet straight edgestone hauled and set @ 15c.	149 85
61 linear feet circular edgestone set @ 10c.	6 10
144 linear feet existing edgestone reset @ 10c.	14 40
545 linear feet crushed stone and concrete foundation furnished and placed @ 40c.	218 00

Carried forward

\$1,110 88

\$2 50

<i>Brought forward</i>	\$1,110 88	\$2 50
149 square yards existing granite block paving relaid @ 35c.	52 15	
14 square yards flagging crosswalks hauled and laid @ \$1	14 00	
10 square yards existing flagging crosswalks relaid @ 45c.	4 50	
7,103 square feet artificial stone sidewalks furnished and laid @ 14 $\frac{1}{2}$ c.	1,047 69	
7 covers reset @ \$3	21 00	
Extra work — Haul paving blocks from Dimock Street Yard instead of from Massachusetts avenue lot:		
406 square yards granite block paving hauled and laid @ 58c.	235 48	
Extra work — Omit water-bound macadam roadway and substitute tar macadam roadway:		
1,788 square yards tar macadam surface furnished and placed @ 80c.	1,430 40	
Extra work — Reset edgestone and lay granite block gutter on Eggleston street, northwest corner Dalrymple street:		
64 linear feet existing edgestone reset @ 10c.	6 40	
21 square yards granite block paving hauled and laid @ 58c.	12 18	
Extra work — Dress edgestone as directed:		
1 $\frac{1}{2}$ days, stonecutter, @ \$5	7 50	
Plus 15 per cent on \$7.50,	1 13	
	\$3,943 31	
Less $\frac{1}{2}$ day, city stonecutter (cutting flagging), @ \$3	1 50	
	\$3,941 81	
Less amount paid in 1913,	3,737 95	
		203 86
		\$206 36

Dawes street, between East Cottage and Willis streets. Length, 429 linear feet. Area, 952 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$131 14
Inspection	98 00
<i>Carried forward</i>	\$229 14

<i>Brought forward</i>		\$229 14
Engineering expense		1 80
Advertising		6 56
Labor, handling stock		12 48
Edgestone, 701 feet 4 inches straight, 29 feet 3 inches circular		526 03
Flagging, 90 feet 1 inch		72 07
Steam roller		45 00
Amount paid to Jeremiah J. McCarthy Company, under contract:		
Removing trees, bushes, stumps, etc.	\$1 00	
482 cubic yards earth excava- tion @ 60c.	289 20	
695 linear feet straight edge- stone hauled and set @ 20c.	139 00	
30 linear feet circular edge- stone set @ 20c.	6 00	
25 linear feet existing edge- stone reset @ 20c.	5 00	
273 square yards granite block paving hauled and laid @ 60c.	163 80	
39 square yards existing granite block paving re- laid @ 50c.	19 50	
19 square yards flagging crosswalks hauled and laid @ \$1	19 00	
688 square yards tar macadam surface furnished and placed @ 85c.	584 80	
3,153 square feet artificial stone sidewalks fur- nished and laid @ 15c.,	472 95	
4 covers reset @ \$3	12 00	
Extra work—Raise man- hole over 6 inches to grade:		
Manhole raised over 6 inches	5 00	
Extra work—Raze wall at Brewer estate:		
1½ days, foreman, @ \$4	6 00	
15 days' labor @ \$2	30 00	
Plus 15 per cent on \$36	5 40	
1¼ days, double team, @ \$6,	7 50	
1¾ days, single team, @ \$3.50	4 81	
		\$1,770 96
Less 3 days' use of city steam roller @ \$15	45 00	
		1,725 96
		\$2,619 04
Credit: Blocks, 525, old granite,	\$10 50	
Edgestone, 4 feet, old, 1 large corner	4 40	
		14 90
		<u>\$2,604 14</u>

Denton terrace, from Washington street to Kittredge street. (Work not started.)

Engineering	\$72 18
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Dexter street, from Alford street to the Everett line. Length, 100 linear feet. Area, 391 square yards. 6-inch tar macadam roadway constructed, edgestone set, block gutters paved, brick walks relaid and crushed stone sidewalks built. Work done by department force.

Labor, excavating, setting and resetting edge-stone	\$69 59
Labor, excavating and relaying brick walks	2 95
Labor, excavating and repaving gutters	8 96
Labor, excavating and relaying crosswalks	16 17
Labor, spreading crushed stone on roadway	58 92
Labor, spreading crushed stone on sidewalk	26 08
Labor, engineering	25 18
Sand and gravel	6 40
Tarvia, 888 gallons	71 88
Flagging, 9 feet 3 inches	7 40
Crushed stone, 107.8 tons	154 15
Teaming	29 75
Engineering	30
Steam roller, rolling	30 00
Edgestone, 200 feet straight	156 00
	\$663 73

Dillaway street, from Hollis street to Dix place. (Work not started.)

Engineering	\$49 55
Engineering expense	1 00
	\$50 55

Don street, between Woodrow avenue and Callender street. Length, 315 linear feet. Area, 910 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid, and artificial stone sidewalks constructed.

Engineering	\$101 56
Inspection	66 50
Engineering expense	2 85
Advertising	6 56
Labor, handling stock	8 78
Edgestone, 584 feet straight	407 39
Flagging, 9 feet, old	3 24
Blocks, 8,675 old granite	173 50
Amount paid to Boston Paving Company, under contract:	
Removing trees, bushes, stumps, etc.	\$5 00
442 cubic yards earth excavation @ 79c.	349 18
578 linear feet street edgestone hauled and set @ 23c., ...	132 94
80 linear feet existing edgestone reset @ 15c.	12 00
196 square yards granite block paving hauled and laid @ 75c.	147 00
34 square yards existing granite block paving relaid @ 50c.	17 00

<i>Carried forward</i>	\$663 12	\$770 38
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<i>Brought forward</i>	\$663 12	\$770 38
2 square yards flagging crosswalks hauled and laid @ 90c.	1 80	
10 square yards existing flagging crosswalks relaid @ 50c.	5 00	
665 square yards tar macadam surface furnished and placed @ 83c.	551 95	
3,899 square feet artificial stone sidewalks furnished and laid @ 15c.	584 85	
7 covers reset @ \$3	21 00	
		1,827 72
		\$2,598 10

Dumas street, between Willowwood and Mascot streets. Length, 440 linear feet. Area, 1,628 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$111 51
Inspection	85 75
Engineering expense	2 55
Labor, handling stock	3 75
Edgestone, 658 feet 10 inches circular, 2 small corners, 22 feet straight	817 06
Flagging, 146 feet	116 80
Blocks, 14,790, old granite	266 81
Teaming surplus material	48 95

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$10 00	
363 cubic yards earth excavation @ 45c.	163 35	
9 cubic yards rock excavation @ \$3.50	31 50	
103 linear feet straight edgestone hauled and set @ 19c.	19 57	
666 linear feet circular edgestone set @ 12c.	79 92	
158 linear feet existing edgestone reset @ 11c.	17 38	
283 square yards granite block paving hauled and laid @ 69c.	195 27	
97 square yards existing granite block paving relaid @ 33c.	32 01	
36 square yards flagging crosswalks hauled and laid @ 69c.	24 84	
67 square yards existing flagging crosswalks relaid @ 40c.	26 80	
1,318 square yards tar macadam surface furnished and placed @ 81c.	1,067 58	
<i>Carried forward</i>	\$1,668 22	\$1,453 18

<i>Brought forward</i>	\$1,668 22	\$1,453 18
5,549 square feet artificial stone sidewalks furnished and laid @ 13c.	721 37	
59 square feet artificial stone driveways furnished and laid @ 13c.	7 67	
4 covers reset @ \$3	12 00	
Extra work — Grade ap- proach to Mountain avenue to conform to Dumas street:		
12 hours' labor @ 25c. . . .	3 00	
Plus 15 per cent on \$3 . . .	45	
		2,412 71
		<u>\$3,865 89</u>

Emmons street, between Paris and Chelsea streets. Length, 320 linear feet.
Area, 924 square yards. Construct 6-inch tar macadam roadway,
edgestone set, block gutters paved, flagging crosswalks laid and
artificial stone sidewalks constructed.

Engineering	\$73 78
Inspection	203 00
Engineering expense	3 17
Advertising	6 76
Edgestone, 558 feet 4 inches straight, 37 feet 8 inches circular and 2 small corners	487 91
Flagging, 71 feet old granite	28 40
Blocks, 6,400 old granite; 200 new granite . .	141 40
Amount paid to Jeremiah J. McCarthy Com- pany, under contract:	
Removing trees, bushes, stumps, etc.	\$20 00
362 cubic yards earth excava- tion @ 70c.	253 40
549 linear feet straight edge- stone and corners hauled and set @ 25c.	137 25
38 linear feet circular edge- stone @ 15c	5 70
57 linear feet existing edge- stone reset @ 15c.	8 55
215 square yards granite block paving hauled and laid @ 65c.	139 75
273 square yards existing gran- ite block paving relaid @ 50c.	136 50
16 square yards flagging crosswalks hauled and laid @ \$1	16 00
28 square yards existing flag- ging crosswalks relaid @ 50c.	14 00
666 square yards tar macadam surface furnished and placed @ 85c.	566 10
34 square yard sexisting brick sidewalks relaid @ 30c.,	10 20
<i>Carried forward</i>	\$1,307 45
	<u>\$944 42</u>

<i>Brought forward</i>	\$1,307 45	\$944 42
3,634 square feet artificial stone sidewalks furnished and laid @ 15c.	545 10	
195 square feet artificial stone driveways furnished and laid @ 15c.	29 25	
1 cover reset @ \$3	3 00	
	\$1,884 80	
Less 549 linear feet straight edgestone hauled by city @ 5c.	27 45	
	1,857 35	
		\$2,801 77

Evans road, between Corey road and Brookline line. Length, 140 linear feet. Area, 458 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed with a loam space.

Engineering		\$101 28
Inspection		31 50
Engineering expense		1 00
Advertising		6 66
Teaming		9 00
Edgestone, 320 feet 4 inches circular, 17 feet straight		384 50
Flagging, 193 feet old granite		69 48
Blocks, 605 old granite		12 10
Amount paid to John J. Lane, under contract:		
Removing trees, bushes, stumps, etc.	\$0 01	
237 cubic yards earth excava- tion @ 50c.	118 50	
29 linear feet straight edge- stone hauled and set @ 30c.	8 70	
299 linear feet circular edge- stone set.*		
6 linear feet existing edge- stone reset @ 15c.	90	
97 square yards granite block paving hauled and laid @ 75c.	72 75	
42 square yards existing gran- ite block paving relaid @ 35c.	14 70	
29 square yards flagging crosswalks hauled and laid @ \$1	29 00	
4 square yards existing flag- ging crosswalks relaid @ 50c.	2 00	
332 square yards tar macadam surface furnished and placed @ 90c.	298 80	
1,824 square feet artificial stone sidewalks furnished and laid @ 16c.	291 84	
1 cover reset @ \$3	3 00	
<i>Carried forward</i>	\$840 20	\$615 52

* No price bid for this work.

<i>Brought forward</i>	\$840 20	\$615 52	
67 square yards loam spaces furnished, placed and seeded @ 25c.	16 75	856 95	\$1,472 47

Gayland street, West Cottage street to Judson street. Length, 603 linear feet. Area, 1,700 square yards. Edgestone set, gutters paved and sidewalks partially constructed. (Work unfinished.)

Engineering	\$91 53	
Inspection	35 00	
Engineering expense	40	
Advertising	5 67	
Labor, handling stock	14 84	
Edgestone, 988 feet straight	652 08	\$799 52

Greenock street, between Blue Hill avenue and Harvard street. Length, 576 linear feet. Area, 1,664 square yards. Six-inch asphalt macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$115 56	
Inspection	91 00	
Engineering expense	4 30	
Advertising	6 76	
Labor, handling stock	17 83	
Edgestone, 1,090 feet 4 inches straight, 30 feet 5 inches circular, 4 small corners	768 07	
Flagging, 120 feet 5 inches	96 33	
Blocks, 9,825, old granite	167 70	
Teaming	2 48	

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$5 00	
902 cubic yards earth excavation @ 87c.	784 74	
2 cubic yards rock excavation @ \$3.25	6 50	
1,104 linear feet straight edgestone hauled and set @ 22c.	242 88	
30 linear feet circular edgestone set @ 15c.	4 50	
24 linear feet existing edgestone reset @ 14c.	3 36	
285 linear feet crushed stone and concrete foundation furnished and placed @ 15c.	42 75	
390 square yards granite block paving hauled and laid @ 75c.	292 50	
24 square yards existing granite block paving relaid @ 45c.	10 80	
26 square yards flagging crosswalks hauled and laid @ 85c.	22 10	

<i>Carried forward</i>	\$1,415 13	\$1,270 03
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<i>Brought forward</i>	\$1,415 13	\$1,270 03
1,278 square yards asphalt macadam surface furnished and placed @ 97c.	1,239 66	
7,209 square feet artificial stone sidewalks furnished and laid @ 14½c.	1,045 31	
139 square feet artificial stone driveways furnished and laid @ 14½c.	20 16	
11 covers reset @ \$3	33 00	
		3,753 26
		<u>\$5,023 29</u>

Hadwin way, between Hyde Park avenue and Hammatt road. Six-inch tar macadam roadway constructed, edgestone set, block paving laid, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$45 66
Inspection	185 50
Engineering expense	2 35
Labor, handling stock	4 51
Flagging, 45 feet 1 inch	36 07
Edgestone, 256 feet straight, 259 feet 6 inches circular	480 36
Amount paid to West Roxbury Trap Rock Company, under contract:	
Removing trees, bushes, stumps, etc.	\$10 00
88 cubic yards subgrading (earth excavation) @ 70c.	61 60
418 cubic yards filling furnished @ \$1	418 00
254 linear feet straight edgestone hauled and set @ 30c.	76 20
261 linear feet circular edgestone set @ 25c.	65 25
39 linear feet existing edgestone reset @ 25c.	9 75
22 square yards existing granite block paving relaid @ 25c.	8 00
10 square yards flagging crosswalks hauled and laid @ 40c.	4 00
11 square yards existing flagging crosswalks relaid @ 25c.	2 75
469 square yards tar macadam surface furnished and placed @ 70c.	328 30
2,701 square feet artificial stone sidewalks furnished and laid @ 16c.	432 16
Extra work — Omit the hauling and laying of granite block paving and substitute the furnishing and laying of same:	
<i>Carried forward</i>	\$1,416 01
	\$754 45

<i>Brought forward</i>	\$1,416 01	\$754 45	
181 square yards granite block paving furnished and laid @ \$2.50	452 50		
		1,868 51	
			<u>\$2,622 96</u>

Hallet street, between Minot street and New York, New Haven and Hartford Railroad. Length, 1,858 linear feet. Area, 7,020 square yards. Six-inch macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$258 05
Inspection	59 50
Engineering expense	3 00
Labor, handling stock	1 02
Blocks, 6,700, old granite	134 00
Bricks	215 06
Flagging, 68 feet 3 inches	53 24
Edgestone, 2 small corners	7 20
Teaming	3 00
	<u>\$734 07</u>

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$45 00
1,372 cubic yards earth excavation @ 40c.	548 80
1,124 cubic yards filling furnished @ 10c.	112 40
3,563 linear feet straight edgestone furnished and set @ 88c.	3,135 44
140 linear feet circular edgestone set @ 14c.	19 60
208 linear feet existing edgestone reset @ 14c.	29 12
1,326 square yards granite block paving hauled and laid @ 80c.	1,060 80
66 square yards existing granite block paving relaid @ 40c.	26 40
15 square yards flagging crosswalks hauled and laid @ 90c.	13 50
5,985 square yards macadam surface furnished and placed @ 77c.	4,608 45
2,440 square yards crushed stone sidewalks furnished and laid @ 54c.	1,317 60
319 square yards brick sidewalks laid @ 48c.	153 12
3 covers reset @ \$3	9 00
	<u>\$11,079 23</u>

<i>Carried forward</i>	\$11,079 23	\$734 07
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<i>Brought forward</i>	\$11,079 23	\$734 07
Extra work — Construct drop-inlets and sluices where directed:		
15 drop-inlets and sluices constructed @ \$26	390 00	
Extra work — Furnish and lay artificial stone sidewalks where directed, on westerly side from Minot street:		
2,807 square feet artificial stone sidewalks furnished and laid @ 16c., ...	449 12	
Extra work — Haul and place filling:		
653 cubic yards filling hauled and placed @ 75c.	489 75	
	\$12,408 10	
Less amount paid in 1912	7,588 75	
		4,819 35
Amount paid to John Kelly Company, under contract:		
25,852 cubic yards filling furnished and placed @ 74c.	\$19,130 48	
Extra work — Build approach to Hallet street from the old road near the railroad:		
5 hours, foreman, @ 62½c., ...	3 13	
41 hours' labor @ 25c.	10 25	
Plus 15 per cent on \$13.38	2 01	
10 days, double team, @ 62½c.	6 25	
Extra work — Build box culvert to drain adjacent marsh land:		
Box culvert furnished and built	120 00	
	\$19,272 12	
Less amount paid in 1911 . . . \$5,661 00		
Less amount paid in 1912 . . . 12,658 48		
Less amount drawn but not paid . . . 952 64		
	19,272 12	
		\$5,553 42

Hancock and Bowdoin streets, from Winter street to Hancock street.
Length, 220 linear feet. Area, 1,235 square yards. Brick block

roadway constructed, edgestone set, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$176 84
Inspection	157 50
Engineering expense	4 00
Advertising	4 40
Labor, handling blocks	1 40
Labor, stonecutter	24 00
Edgestone, 406 feet 6 inches circular	487 80
Flagging, 93 feet 3 inches	74 60
Blocks, 730, old granite	14 60
Steam roller	3 25

Amount paid to Central Construction Company, under contract:

408 linear feet circular edge-stone set @ 20c.	\$81 60	
162 linear feet existing edge-stone reset @ 20c.	32 40	
169.2 cubic yards concrete base furnished and laid @ \$5.50	930 60	
25 square yards granite block paving hauled and laid, gravel joints, @ 80c.	20 00	
17 square yards existing granite block paving relaid, gravel joints, @ 70c.	11 90	
14 square yards granite block paving hauled and laid, grout joints, including concrete base, @ \$2	28 00	
5 square yards flagging crosswalks hauled and laid, gravel joints, @ \$1.50	7 50	
7 square yards existing flagging crosswalks relaid, gravel joints, @ 70c.	4 90	
20 square yards flagging crosswalks hauled and laid, grout joints, including concrete base, @ \$1.25	25 00	
1,235 square yards brick block pavement furnished and laid @ \$2.30	2,840 50	
3,796 square feet artificial stone sidewalks furnished and laid @ 25c.	949 00	
205 square yards loam spaces, furnished, placed and seeded @ \$1	205 00	
Extra work — Excavate rock in edgestone trenches where directed:		
16 cubic yards rock excavated @ \$3	48 00	
Carried forward	\$5,184 40	\$948 39

<i>Brought forward</i>	\$5,184 40	\$948 39
Extra work — Fill abandoned catch-basins:		
1 hour, foreman, @ 50c.	50	
3 hours' labor @ 25c.	75	
Plus 15 per cent on \$1.25	19	
		5,185 84
		\$6,134 23
Credit: 114 feet straight edgestone, 58 feet circular, 2 small corners, all old		78 30
		<u>\$6,055 93</u>

Hansborough street, between Blue Hill avenue and Harvard street. Length, 609 linear feet. Area, 2,301 square yards. Six-inch asphalt macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$87 14	
Inspection	52 50	
Engineering expense	1 50	
Advertising	6 76	
Labor, handling stock	15 26	
Edgestone, 881 feet straight, 19 feet 5 inches circular and 2 small corners	646 44	
Flagging, 112 feet 10 inches	94 26	
Blocks, 15,360	196 20	
Amount paid to James Doherty, under contract:		
Removing trees, bushes, stumps, etc.	\$5 00	
779 cubic yards earth excavation @ 55c.	428 45	
884 linear feet straight edgestone hauled and set @ 22c.	194 48	
25 linear feet circular edgestone set @ 15c.	3 75	
301 linear feet existing edgestone reset @ 14c.	42 14	
419 square yards granite block paving hauled and laid @ 75c.	314 25	
20 square yards existing granite block paving relaid @ 45c.	9 00	
30 square yards flagging crosswalks hauled and laid @ 85c.	25 50	
1,870 square yards asphalt macadam surface furnished and placed @ 97c.	1,813 90	
8,765 square feet artificial stone sidewalks furnished and laid @ 14 $\frac{1}{2}$ c.	1,270 93	
71 square feet artificial stone driveways furnished and laid @ 14 $\frac{1}{2}$ c.	10 30	
5 covers reset @ \$3	15 00	
<i>Carried forward</i>	\$4,132 70	\$1,100 06

<i>Brought forward</i>	\$4,132 70	\$1,100 06	
Extra work — Haul surplus excavation to Dumas street:			
63 tons material hauled to Dumas street, $\frac{1}{2}$ mile overhaul, per $\frac{1}{2}$ mile per ton (section 1, Article 3)			
@ 11c.	6 93		
	\$4,139 63		
Less amount charged to Dumas street	6 93		
		4,132 70	
			<u>\$5,232 76</u>

Harmon street, from Oakland street southeasterly for a distance of 90 feet.
(Rough graded only.)

Labor, employees excavating	\$919 13	
Teaming	344 36	
Labor, resetting sign post	1 12	
Dynamite and fuse	1 49	
		<u>\$1,266 10</u>

Harold Park, southerly from Harold street. (Work not started.)

Engineering	\$38 75	
Engineering expense	50	
Advertising	1 77	
		<u>\$41 02</u>

Haverford street, from Montebello road 100 feet westerly. (Work not started.)

Engineering	\$29 60	
Advertising	1 77	
		<u>\$31 37</u>

Henshaw street, at Cambridge street. (Work not started.)

Engineering	\$65 20	
Engineering expense	70	
		<u>\$65 90</u>

Holiday street, between Bowdoin and Topliff streets. Length, 1,011 linear feet. Area, 2,921 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$69 46	
Inspection	94 50	
Engineering expense	2 75	
Labor, handling stock	1 75	
Flagging, 164 feet 10 inches	129 94	
Edgestone, 1,378 feet straight, 68 feet 10 inches circular and 2 small corners	1,009 77	
Bricks, 3,650	43 80	
Blocks, 21,305, old granite	337 10	
Teaming	12 80	

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.,	\$5 00	

<i>Carried forward</i>	\$5 00	\$1,701 87
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<i>Brought forward</i>	\$5 00	\$1,701 87
1,320 cubic yards earth excavation @ 50c.	660 00	
1,374 linear feet straight edgestone hauled and set @ 21c.	288 54	
76 linear feet circular edgestone set @ 15c.	11 40	
572 linear feet existing edgestone reset @ 11c.	62 92	
590 square yards granite block paving hauled and laid @ 65c.	383 50	
165 square yards existing granite block paving relaid @ 35c.	57 75	
37 square yards flagging crosswalks laid @ 45c.	16 65	
51 square yards existing flagging crosswalks relaid @ 40c.	20 40	
2,214 square yards macadam surface furnished and placed @ 65c.	1,439 10	
12,702 square feet artificial stone sidewalks furnished and laid @ 13c.	1,651 26	
66 square feet artificial stone driveways furnished and laid @ 13c.	8 58	
8 covers reset @ \$3	24 00	
	\$4,629 10	
Extra work — Remove trees where directed:		
10 hours, foreman, @ 62½c., ...	6 25	
230 hours, labor @ 25c.	57 50	
Plus 15 per cent on \$63.75	9 56	
16 hours, double team, @ 75c.	12 00	
	4,714 41	
		\$6,416 28

Homes avenue, between Topliff and Draper streets. Length, 1,001 linear feet. Area, 2,892 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$167 22
Inspection	168 00
Engineering expense	1 70
Advertising	2 76
Labor, handling stock	28 46
Edgestone, 1,763 feet 10 inches straight, 10 small corners	1,200 13
Bricks, 25,150	301 80
Lumber	37 91
Teaming	2 40
Blocks, 700, old granite	14 00
<i>Carried forward</i>	\$1,924 38

Brought forward \$1,924 38
 Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$10 00
1,108 cubic yards earth excavation @ 55c.	609 40
10 cubic yards water box excavation @ \$1.25	12 50
3 cubic yards rock excavation @ \$3	9 00
1,761 linear feet straight edgestone hauled and set @ 21c.	369 81
32 linear feet circular edgestone set @ 15c., ...	4 80
214 linear feet existing edgestone reset @ 12c.	25 68
612 square yards granite block paving hauled and laid @ 65c.	397 80
86 square yards existing granite block paving relaid @ 35c.	30 10
35 square yards existing flagging crosswalks relaid @ 40c.	14 00
12,180 square feet artificial stone sidewalks furnished and laid @ 13c.	1,583 40
332 square feet artificial stone driveways furnished and laid @ 13c.	43 16
5 covers reset @ \$3	15 00
	\$3,124 65

Extra work — Omit water-bound macadam roadway and substitute tar macadam roadway:

2,202 square yards tar macadam roadway furnished and placed @ 85c.	1,871 70
	4,996 35

\$6,920 73

Howes street, between Dorchester avenue and Pleasant street. Length, 591 linear feet. Area, 1,707 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$63 36
Inspection	42 00
Engineering expense	50
Advertising	2 76
Labor, handling stock	1 68

Carried forward \$110 30

<i>Brought forward</i>	\$110 30
Edgestone, 7 feet 5½ inches circular and 4 small corners	23 36
Flagging, 112 feet	89 60
Blocks, 10,885 old granite	217 70
Amount paid to James Doherty, under contract:	

Removing trees, bushes, stumps, etc.	\$5 00	
694 cubic yards earth excavation @ 50c.	347 00	
13 linear feet circular edgestone set @ 15c.	1 95	
997 linear feet existing edgestone reset @ 11c.	109 67	
393 square yards granite block paving hauled and laid @ 50c.	196 50	
80 square yards existing granite block paving relaid @ 35c.	28 00	
21 square yards flagging crosswalks hauled and laid @ 77c.	16 17	
1,166 square yards tar macadam surface furnished and placed @ 84c.	979 44	
5,584 square feet artificial stone sidewalks furnished and laid @ 13c.	725 92	
144 square feet artificial stone driveways furnished and laid @ 13c.	18 72	
3 covers reset @ \$3	9 00	
Extra work — Cut joints in old artificial stone to conform with new work and trim tree roots where directed:		
8 hours, finisher, @ 62½c.	5 00	
21½ hours' labor @ 25c.	5 38	
Plus 15 per cent on \$10.38	1 56	
		2,449 31
		\$2,890 27
Credit: Edgestone, 19 feet old,	\$6 65	
Flagging, 14 feet old	5 04	
		11 69
		<u>\$2,878 58</u>

Islington street, between Webster street and Brighton avenue. Length, 263 linear feet. Area, 622 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed. (Unfinished.)

Engineering	\$84 71
Inspection	42 00
Engineering expense	75
Advertising	5 89
<i>Carried forward</i>	\$133 35

<i>Brought forward</i>	\$133 35	
Edgestone, 463 feet 2 inches straight, 13 feet circular and 2 small corners	337 17	
Blocks, 700, old granite	14 00	
Amount paid to A. J. & G. H. McMurtry, under contract:		
Preparing site	\$2 00	
150 cubic yards earth excavation @ 60c.	90 00	
489 linear feet straight edgestone and corners hauled and set @ 15c.	73 35	
26 linear feet circular edgestone set @ 10c.	2 60	
37 linear feet existing edgestone reset @ 5c.	1 85	
26 square yards existing granite block paving relaid @ 30c.	7 80	
8 square yards existing flagging crosswalks relaid @ 25c.	2 00	
587 square yards tar macadam surface furnished and placed @ 65c.	381 55	
2,400 square feet artificial stone sidewalks furnished and laid (un finished) @ 7c.	168 00	
2 covers reset @ \$3	6 00	
	\$735 15	
Amount retained	110 27	
	624 88	
	\$1,109 40	

Kenneth street, from Stratford street to Farrington avenue.

Credit on account of overcharges in account for 1912

Edgestone	\$264 65
Teaming	54 49
	\$319 14

Kilton street, between Park street and Talbot avenue. Length, 953 linear feet. Area, 2,751 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed. (No payment on contract until 1914.)

Engineering	\$85 50
Inspection	126 00
Engineering expense	3 75
Labor, handling stock	26 99
Edgestone, 1,516 feet 5 inches straight, 9 feet 5 inches circular, 4 small corners	1,053 03
Flagging, 250 feet	195 00
Blocks, 26,260 old granite	502 84
Teaming	3 62
Amount paid to James Doherty, under contract	0 00
	\$1,996 73

Kittredge street, between Metropolitan avenue and Cornell street. Work not started.

Engineering	\$86 38	
Engineering expense	40	
		<u>\$86 78</u>

* *Lawndale terrace*, between Lamartine and Amory streets. Length, 261 linear feet. Area, 516 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed. (Unfinished.)

Engineering	\$42 51
Inspection	70 00
Engineering expense	1 45
Advertising	4 20
Labor, handling stock	8 33
Flagging, 96 feet 10 inches	74 75
Edgestone, 82 feet 6 inches circular and 440 feet straight	405 40
Blocks, 5,950, old granite	71 40

Amount paid to James Doherty, under contract:

Removing trees, etc.	\$5 00
308 cubic yards earth excavation @ 65c.	200 20
439 linear feet straight edgestone hauled and set @ 25c.	109 75
83 linear feet circular edgestone set @ 18c.	14 94
9 linear feet existing edgestone reset @ 15c.	1 35
171 square yards granite block paving hauled and laid @ 80c.	136 80
1 square yard existing granite block paving relaid @ 50c.	50
19 square yards flagging crosswalks hauled and laid @ 90c.	17 10
354 square yards tar macadam surface furnished and placed @ \$1	354 00
2 square yards existing brick sidewalks relaid @ 35c., ...	70
1,750 square feet artificial stone sidewalks furnished and laid (unfinished) @ 7c., ...	122 50
Building fence	179 00

\$1,141 84

Less 5 per cent retained 57 09

1,084 75

\$1,760 79

Lithgow street, between Washington street and Talbot avenue. Length, 464 linear feet. Area, 1,404 square yards. Six-inch tar macadam

* See, also, special appropriation, "Tunnel under railroad tracks between Boylston and Green streets, Jamaica Plain."

roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.	
Engineering	\$91 70
Inspection	22 50
Engineering expense	1 45
Labor, handling stock	3 40
Advertising	6 76
Edgestone, 10 feet 3 inches and 2 small corners, ...	11 84
Flagging, 213 feet	170 40
Blocks, 12,300	181 20
Teaming	1 44
Steam roller	37 50
Amount paid to Jeremiah J. McCarthy Company, under contract:	
Removing trees, bushes, stumps, etc.	\$1 00
501 cubic yards subgrading (earth excavation) @ 65c.	325 65
2½ cubic yards subgrading (rock excavation) @ \$4, ...	10 00
10 linear feet straight edgestone set @ 15c.	1 50
7 linear feet circular edgestone set @ 15c.	1 05
591 linear feet existing edgestone reset @ 15c.	88 65
294 square yards granite block paving hauled and laid @ 70c.	205 80
53 square yards existing granite block paving relaid @ 40c.	21 20
43 square yards flagging crosswalks hauled and laid @ \$1	43 00
12 square yards existing flagging crosswalks relaid @ 40c.	4 80
1,125 square yards tar macadam surface furnished and placed @ 84c.	945 00
2,285 square feet artificial stone sidewalks furnished and laid @ 15c.	342 75
1 cover reset @ \$3	3 00
	\$1,993 40
Less 2½ days' use of city steam roller @ \$15	37 50
	1,955 90
	\$2,584 09

Lovering place, between Washington street and Harrison avenue. Length, 331 linear feet. Area, 579 square yards. Street widened, edgestone set, flagging crosswalks laid, roadway paved with asphalt and artificial stone sidewalks were constructed on the northerly side of the street and brick sidewalks on the southerly side.

Engineering	\$44 43
Inspection	91 00
<i>Carried forward</i>	\$135 43

<i>Brought forward</i>		\$135 43
Engineering expense		3 25
Advertising		4 00
Labor, handling stock		5 72
Edgestone, 307 feet 11 inches straight, 2 large corners		227 54
Blocks, 25, old granite		50
Bricks, 4,100		43 70
Flagging		40 65
Amount paid to James Doherty, under contract:		
Removing trees, fences, etc.	\$20 00	
305 linear feet straight edgestone hauled and set @ 26c.	79 30	
10 linear feet circular edgestone set @ 15c.	1 50	
373 linear feet existing edgestone reset @ 15c.,	55 95	
29 square yards existing granite block paving relaid, gravel joints, @ 51c.	14 79	
13 square yards existing granite block paving relaid, pitch joints, including concrete base, @ \$2.05	26 65	
12 square yards flagging crosswalks hauled and laid, pitch joints, including concrete base, @ \$2.27	27 24	
525 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.74,	1,438 50	
167 square yards brick sidewalks relaid @ 43c.	71 81	
997 square feet artificial stone sidewalks furnished and laid @ 19c.	189 43	
1 cover reset @ \$3	3 00	
Extra work — Remove old concrete under edgestone:		
72 hours' labor @ 25c.	18 00	
Plus 15 per cent on \$18	2 70	
Extra work — Seal up abandoned manhole:		
4 hours, mason, @ 70c.	2 80	
10 hours' labor @ 25c.	2 50	
Plus 15 per cent on \$5.30,	80	
½ barrel cement @ \$1.85	93	
		1,955 90
		<u>\$2,416 79</u>

Lubec street, between Gove street and Porter street. (Work not started.)

Engineering	\$65 75	
Engineering expense	42	
Advertising	3 58	
		<u>\$69 75</u>

Maitland street, between Beacon street and Boston & Albany Railroad.
(Work done in 1912.)

Engineering expense	<u>\$0 40</u>
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Manthorne road, between Weld street and Centre street. (Work not started.)

Engineering	<u>\$43 00</u>
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Marlowe street, between Vinson street and Park street. (Work not started.)

Engineering	\$38 60	
Engineering expense	40	
Advertising	5 67	
Edgestone, 9 feet 4 inches circular	11 20	
		<u>\$55 87</u>

Marmion street, between Montebello road and 112 feet southwesterly.
(Work not started.)

Engineering	\$31 25	
Advertising	1 77	
		<u>\$33 02</u>

Mascoma street, between Quincy street and Lawrence avenue. Length, 605 linear feet. Area, 1,748 square yards. (Work unfinished.)
Constructed 6-inch tar macadam roadway, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$76 65	
Inspection	301 00	
Engineering expense	4 05	
Labor, handling stock	16 59	
Edgestone, 1,043 feet 1 inch straight	754 71	
Flagging, 165 feet 6 inches, 46 feet 6 inches circular	59 58	
Blocks, 14,087, old granite	281 74	
Teaming	3 00	
Amount paid the Fred S. and A. D. Gore Corporation, under contract:		
Removing trees, brushes, stumps, etc.	\$1 00	
800 cubic yards earth excavation @ 50c.	400 00	
1,037 linear feet straight edgestone hauled and set @ 19c.	197 03	
54 linear feet circular edgestone set @ 13c.	7 02	
80 linear feet existing edgestone reset @ 13c.	10 40	
347 square yards granite block paving hauled and laid @ 55c.	190 85	
		<u>\$806 30</u>

Carried forward \$1,497 32

<i>Brought forward</i>	\$806 30	\$1,497 32
94 square yards existing granite block paving relaid @ 43c.	40 42	
38 square yards flagging crosswalks hauled and laid @ 85c.	23 80	
29 square yards existing flagging crosswalks relaid @ 43c.	12 47	
1,367 square yards tar macadam surface furnished and placed @ 83c.	1,134 61	
7,153 square feet artificial stone sidewalks furnished and laid @ 13c.	929 89	
58 square feet artificial stone driveways furnished and laid @ 13c.	7 54	
5 covers reset @ \$3	15 00	
	\$2,970 03	
Less 15 per cent retained	445 50	
		2,524 53
		\$4,021 85

Mascot street, between Mountain and Ballou avenues. Length, 1,151 linear feet. Area, 3,325 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$151 93
Inspection	196 00
Engineering expense	3 29
Labor, handling stock	23 48
Edgestone, 1,450 feet straight, 697 feet 2 inches circular and 2 small corners	1,858 15
Flagging, 115 feet 7 inches	92 47
Blocks, 29,650 old granite	390 68
Amount paid to James Doherty, under contract:	
Removing trees, bushes, stumps, etc.	\$30 00
967 cubic yards earth excavation @ 45c.	435 15
5 cubic yards rock excavation @ \$3.50	17 50
1,440 linear feet straight edgestone hauled and set @ 19c.	273 60
707 linear feet circular edgestone set @ 12c.	84 84
55 linear feet existing edgestone reset @ 11c.	6 05
752 square yards granite block paving hauled and laid @ 69c.	518 88
1 square yard existing granite block paving relaid @ 33c.	33
<i>Carried forward</i>	\$1,366 35
	\$2,716 00

<i>Brought forward</i>	\$1,366 35	\$2,716 00	
24 square yards flagging crosswalks hauled and laid @ 69c.	16 56		
2,593 square yards tar macadam surface furnished and placed @ 81c.	2,100 33		
13,643 square feet artificial stone sidewalks furnished and laid @ 13c.	1,773 59		
57 square feet artificial stone driveways furnished and laid @ 13c.	7 41		
22 covers reset @ \$3	66 00		
Extra work — Grade approaches as directed:			
12 hours' labor @ 25c.	3 00		
Plus 15 per cent on \$3	45		
		5,333 69	
			\$8,049 69

Maxfield street, between La Grange and Bellevue streets. Length, 769 linear feet. Area, 2,222 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed with seeded loam spaces.

Engineering	\$49 07	
Inspection	266 00	
Engineering expense	95	
Labor, handling stock	24 58	
Edgestone, 1,512 feet 6 inches straight, 37 feet 6 inches circular, 4 small corners	1,011 57	
Flagging, 105 feet	84 00	
Blocks, 22,625, old granite	326 58	
Amount paid to West Roxbury Trap Rock Company, under contract:		
Removing trees, bushes, stumps, etc.	\$10 00	
860 cubic yards earth excavation @ 60c.	516 00	
1½ cubic yards rock excavation @ \$3	4 50	
1,506 linear feet straight edgestone hauled and set @ 25c.	376 50	
51 linear feet circular edgestone set @ 25c.	12 75	
683 linear feet crushed stone and concrete foundation furnished and placed @ 30c.	204 90	
537 square yards granite block paving hauled and laid @ \$1.25	671 25	
26 square yards existing granite block paving relaid @ 50c.	13 00	
23 square yards flagging crosswalks hauled and laid @ 50c.	11 50	
<i>Carried forward</i>	\$1,820 40	\$1,762 75

<i>Brought forward</i>	\$1,820 40	\$1,762 75
1,756 square yards tar macadam surface furnished and placed @ 60c.	1,053 60	
7,157 square feet artificial stone sidewalks furnished and laid @ 14c.	1,001 98	
9 covers reset @ \$3	27 00	
295 square yards loam spaces furnished, placed and seeded @ 40c.	118 00	
	\$4,020 98	
Less 1,000 second-hand paving blocks taken by contractor @ 2c.	20 00	
		4,000 98
		\$5,763 73

Mitchell street, from Old Colony avenue about 240 feet northerly. Length, 265 linear feet. Area, 382 square yards. Filling made, edgestone set, block gutters paved, flagging crosswalks laid, brick sidewalks laid, retaining wall built and 6-inch tar macadam roadway constructed. (Work unfinished.)

Engineering	\$127 04
Inspection	80 50
Engineering expense	3 85
Advertising	6 76
Labor, handling stock	2 46
Edgestone, 114 feet 1 inch straight	95 60
Flagging, 50 feet	39 00
Blocks, 2,100 old granite, 16 feet 11 inches circular	44 00
Bricks, 6,500	84 50
Steam roller	13 00
Amount paid to William J. Rafferty Company, under contract:	
Removing trees, bushes, stumps, etc.	\$0 01
74 cubic yards earth excavation @ \$1	74 00
233 cubic yards filling furnished @ 50c.	116 50
113 linear feet straight edgestone hauled and set @ 20c.	22 60
17 linear feet circular edgestone set @ 15c.	2 55
402 linear feet existing edgestone reset @ 12c.	48 24
51 square yards granite block paving hauled and laid @ 50c.	25 50
120 square yards existing granite block paving relaid @ 35c.	42 00
10 square yards flagging crosswalks hauled and laid @ 75c.	7 50
<i>Carried forward</i>	\$338 90
	\$496 71

<i>Brought forward</i>	\$338 90	\$496 71
233 square yards tar macadam surface furnished and placed @ 95c.	221 35	
162 square yards brick sidewalks laid @ 38c.	61 56	
38 square yards existing brick sidewalks relaid @ 30c.	11 40	
4 covers reset @ \$3	12 00	
Building wall	175 00	
	\$820 21	
Less 15 per cent retained,	123 03	
		697 18
		<u>\$1,193 89</u>

Montclair avenue, between Centre and Fletcher streets. Length, 1,106 linear feet. Area, 3,195 square yards. Set edgestone, pave gutters, flagging crosswalks laid, artificial stone sidewalks constructed and 6-inch tar macadam roadway constructed.

Engineering	\$128 83
Inspection	232 75
Engineering expense	2 85
Labor, handling stock	22 32
Edgestone, 1,319 feet 8 inches straight, 838 feet circular and 5 small corners	1,953 09
Flagging, 225 feet 1 inch	179 92
Blocks, 26,300, old granite	524 10
Amount paid to Thomas F. Minton, under contract:	
Removing trees, bushes, stumps, etc.	\$10 00
1,638 cubic yards earth excavation @ 50c.	819 00
14 cubic yards water-box excavation @ \$1	14 00
1 cubic yard rock excavation @ \$2	2 00
1,307 linear feet straight edgestone hauled and set @ 28c.	365 96
889 linear feet circular edgestone set @ 18c.	160 02
50 linear feet existing edgestone reset @ 18c.	9 00
730 linear feet crushed stone and concrete foundation furnished and placed @ 35c.	255 50
781 square yards granite block paving hauled and laid @ \$1	781 00
37 square yards existing granite block paving relaid @ 45c.	16 65
50 square yards flagging crosswalks laid @ 50c., ...	25 00
9,895 square feet artificial stone sidewalks furnished and laid @ 15c., ...	1,484 25
<i>Carried forward</i>	\$3,942 38
	\$3,043 86

<i>Brought forward</i>	\$3,942 38	\$3,043 86
164 square feet artificial stone driveways furnished and laid @ 15c.	24 60	
16 covers reset @ \$3	48 00	
Extra work—Omit water-bound macadam roadway and substitute tar macadam roadway:		
2,509 square yards tar macadam roadway furnished and laid @ 75c.	1,881 75	
Extra work—Omit loam spaces and substitute full width artificial stone sidewalks:		
3,700 square feet artificial stone sidewalks furnished and laid @ 15c.	555 00	
Extra work—Raise manholes over 6 inches:		
6 manholes raised @ \$5	30 00	
Extra work—Haul circular edgestone from Centre street:		
14 days' labor @ \$2	28 00	
Plus 15 per cent on \$28	4 20	
7 days, double team, @ \$6	42 00	
Extra work—Lay blocks on cement in front of trees:		
$\frac{1}{2}$ day, paver, @ \$5	2 50	
2 days' labor @ \$2	4 00	
Plus 15 per cent on \$6.50	98	
1 bag Portland cement @ 50c.	50	
		6,563 91
		<u>\$9,607 77</u>

Montebello road, from Washington street to Brookside avenue. Work not started.

Engineering	\$102 06
Engineering expense	40
Advertising	6 27
Flagging, 19 feet 5 inches	15 15
	<u>\$123 88</u>

Morton street, Blue Hill avenue to beyond Leslie street.

Final payment made to James Doherty on contract for work done in 1911	<u>\$858 88</u>
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Morton street, west side, from Greendale road 607 feet. Work not started.

Advertising	<u>\$1 77</u>
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Mountfort street, between Audubon road and St. Mary's street. Length, 306 linear feet. Area, 1,209 square yards. Six-inch Bermudez asphalt macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$155 38
Inspection	73 50
Engineering expense	3 20
Advertising	6 81
Labor, handling blocks	6 91
Edgestone, 366 feet straight, 26 feet 8 inches circular	276 30
Flagging, 95 feet	76 00
Blocks, 600 old granite	12 00

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$5 00
96 cubic yards earth excavation @ 50c.	48 00
309 cubic yards filling furnished @ 70c.	216 30
360 linear feet straight edge-stone hauled and set @ 22c.	79 20
27 linear feet circular edge-stone set @ 15c.	4 05
17 linear feet existing edge-stone reset @ 15c.	2 55
214 square yards granite block paving hauled and laid @ 75c.	160 50
5 square yards existing granite block paving relaid @ 45c.	2 25
20 square yards flagging crosswalks hauled and laid @ 85c.	17 00
970 square yards asphalt macadam surface furnished and placed @ \$1.15	1,115 50
2,462 square feet artificial stone sidewalks furnished and laid @ 15c.	369 30
Extra work — F u r n i s h and place filling on approaches as directed:	
991 cubic yards filling furnished and placed @ 70c.	693 70
Extra work — R e b u i l d top of manhole:	
4 hours, mason, @ 62½c.	2 50
4 hours, tender, @ 25c.	1 00
4 hours' labor @ 25c.	1 00
Plus 15 per cent on \$4.50	68
240 bricks @ \$10.50 per M.	2 52
3 bags cement @ 50c.	1 50
	2,722 55

	\$3,332 65
Credit: Blocks, 1,600 old granite	32 00

\$3,300 65

Myrick street, from Easton street to Coolidge road. (Work not started.)

Engineering	\$48 61	
Engineering expense	50	
Advertising	5 77	
		<u>\$54 88</u>

Naples road, between Commonwealth avenue and Brookline line. Length, 135 linear feet. Area, 498 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$59 18
Inspection	14 00
Engineering expense	1 75
Advertising	6 86
Edgestone, 250 feet old, and 2 small corners	91 10
Flagging, 20 feet old	7 20
Teaming	3 00

Amount paid to John J. Lane, under contract:

Removing trees, bushes, stumps, etc.	\$0 01	
173 cubic yards earth excavation @ 50c.	86 50	
255 linear feet straight edgestone and corners hauled and set @ 25c.	63 75	
124 linear feet existing edgestone reset @ 15c.	18 60	
85 square yards granite block paving hauled and laid @ 75c.	63 75	
57 square yards existing granite block paving relaid @ 35c.	19 95	
10 square yards existing flagging crosswalks relaid @ 50c.	5 00	
403 square yards tar macadam surface furnished and placed @ 90c.	362 70	
1,837 square feet artificial stone sidewalks furnished and laid @ 16c.	293 92	
2 covers reset @ \$3	6 00	
Extra work — Haul and lay flagging crosswalks as directed:		
4.4 square yards flagging crosswalks hauled and laid @ \$1	4 40	
		<u>924 58</u>
		<u>\$1,107 67</u>

Normandy street, between Creston and Intervale streets. Length, 265 linear feet. Area, 766 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$101 63
Inspection	108 50
Engineering expense	1 85
Labor, handling stock	2 06
Carried forward	<u>\$214 04</u>

<i>Brought forward</i>		\$214 04
Edgestone, 244 feet 1 inch straight and 10 feet 5 inches circular		176 67
Flagging, 77 feet		52 08
Blocks, 7,600 old granite		152 00
Advertising		6 38
Teaming		1 50
Amount paid to Hugh J. McGuire, under contract:		
Removing trees, bushes, etc.	\$1 00	
313 cubic yards earth ex- cavation @ 55c.	172 15	
237 linear feet straight edge- stone hauled and set @ 22c.	52 14	
10 linear feet circular edge- stone set.*		
76 linear feet existing edge- stone reset @ 14c.	10 64	
181 square yards granite block hauled and laid @ 80c.	144 80	
23 square yards existing granite block paving relaid @ 50c.	11 50	
17 square yards flagging crosswalks hauled and laid at \$1.50	25 50	
6 square yards existing flagging crosswalks re- laid @ 75c.	4 50	
638 square yards tar mac- adam surface fur- nished and placed @ 90c.	574 20	
1,904 square feet artificial stone sidewalks furnished and laid @ 15c.	285 60	
4 covers reset @ \$3	12 00	
Extra work — Cut gutter- mouth as directed:		
1½ days, stonecutter, @ \$5,	6 25	
Plus 15 per cent on \$6.25,	94	
		1,301 22
		\$1,903 89
<i>Orient avenue, from Walley street to beyond Tower street. Six-inch asphalt macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks con- structed. (Work unfinished)</i>		
Engineering		\$566 81
Inspection		367 50
Engineering expense		11 36
Advertising		6 76
Labor, handling stock		11 33
Edgestone, 3,766 feet straight, 660 feet 4½ inches circular and 10 small corners		3,763 52
Flagging, 713 feet 10 inches		427 88
<i>Carried forward</i>		\$5,155 16

* No price bid for this kind of work.

<i>Brought forward</i>		\$5,155 16
Amount paid to James Doherty, under contract:		
27 trees and stumps removed @ \$7	\$189 00	
2,500 cubic yards earth excavation @ 60c. . . .	1,500 00	
3,700 linear feet straight edgestone hauled and set @ 23c.	851 00	
615 linear feet circular edgestone set @ 15c.	92 25	
70 linear feet existing edgestone reset @ 15c.	10 50	
700 linear feet crushed stone and concrete foundation furnished and placed @ 17c.	119 00	
1,300 square yards granite block paving furnished and laid @ \$2.12	2,756 00	
80 square yards flagging crosswalks hauled and laid @ 90c. . . .	72 00	
26,000 square feet artificial stone sidewalks furnished and laid @ 16c.	4,160 00	
4 covers reset @ \$3	12 00	
	\$9,761 75	
Less 15 per cent retained	1,464 26	
	8,297 49	
		<u>\$13,452 65</u>

Perkins street, from Prince street to Brookline line. Length, 315 feet. Widened, subgraded, resurfaced with macadam 4 inches deep and dish gutters paved.

Labor, employees paving gutters	\$156 00
Labor, employees macadamizing roadway	122 50
Cement	93
Crushed stone, 117 tons	122 94
Teaming	137 87
Water cart	33 00
Gravel, 26 double loads	36 40
Steam roller	110 50
Advertising	2 06
	<u>\$722 20</u>

Pinehurst street, from Belgrade avenue to Dudley avenue. (Work not started.)

Engineering	<u>\$102 53</u>
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Playstead road, between Savin Hill avenue and Springdale street. Length, 335 linear feet. Area, 1,049 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$135 80
Inspection	147 00
Engineering expense	2 60
Advertising	6 86
Labor, handling stock	11 34
Edgestone, 639 feet 8 inches straight, 81 feet 1½ inches circular	545 12
Flagging, 116 feet 6 inches	93 20
Bricks, 110	1 43

Amount paid to William J. Rafferty Company, under contract:

Removing trees, bushes, stumps, etc.	\$0 01	
299 cubic yards earth excavation @ 40c.	119 60	
80 cubic yards rock excavation @ \$5	400 00	
630 linear feet straight edgestone hauled and set @ 20c.	126 00	
81 linear feet circular edgestone set @ 15c.	12 15	
37 linear feet existing edgestone reset @ 15c.	5 55	
36 square yards existing granite block paving relaid @ 50c.	18 00	
26 square yards flagging crosswalks hauled and laid @ \$1	26 00	
8 square yards existing flagging crosswalks relaid @ 75c.	6 00	
733 square yards tar macadam surface furnished and placed @ 95c.	696 35	
19 square yards existing brick sidewalks relaid @ 50c., ...	9 50	
4,405 square feet artificial stone sidewalks furnished and laid @ 16c.	704 80	
4 covers reset @ \$3	12 00	
Extra work — Omit the hauling and laying of granite block paving and substitute the furnishing and laying of the same:		
246 square yards granite block paving furnished and laid @ \$1.90	467 40	
		2,603 36
		\$3,546 71

Potosi street, from Mt. Ida road to Percival street. (Work not started.)

Engineering	\$53 43
Engineering expense	40
Advertising	6 16
	\$59 99

Priesing street, between Mozart street and Chestnut avenue. Length, 680 linear feet. Area, 523 square yards. Six-inch tar macadam roadway constructed for a distance of about 225 linear feet from

Mozart street, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$109 34
Inspection	123 00
Engineering expense	2 40
Advertising	6 81
Labor, handling stock	4 36
Edgestone, 145 feet 11 inches straight, 298 feet 10 inches circular	460 74
Flagging	115 93
Blocks, 5,175 old granite	103 50
Teaming	10 63
Steam roller	44 30

Amount paid to John Kelly Company, under contract:

570 cubic yards earth excavation @ 45c.	\$256 50	
143 linear feet straight edgestone hauled and set @ 16c.	22 88	
300 linear feet circular edgestone set @ 15c.	45 00	
1,017 linear feet existing edgestone reset @ 10c.	101 70	
137 square yards granite block paving hauled and laid @ 75c.	102 75	
370 square yards existing granite block paving relaid @ 35c.	129 50	
34 square yards flagging crosswalks hauled and laid @ \$1	34 00	
523 square yards tar macadam surface furnished and placed @ 75c.	392 25	
8,366 square feet artificial stone sidewalks furnished and laid @ 15c.	1,254 90	
8 covers reset @ \$3	24 00	
	\$2,363 48	
Less 3 days' use of city steam roller @ \$15	45 00	
	\$2,318 48	
Less 600 second-hand paving blocks taken by contractor @ 2c.	12 00	
	\$2,306 48	
Less 125 second - hand crossing blocks taken by contractor @ 10c.	12 50	
		2,293 98
		\$3,274 99
Credit: Edgestone, 19 feet 10 inches and 5 small corners (old)	\$21 94	
Flagging, 20 feet 4 inches (old)	7 32	
		29 26
		<u>\$3,245 73</u>

Providence street, from 70 feet east of Church street to Berkeley street.
Length, 1,117 linear feet. Area, 4,316 square yards. Roadway paved with granite blocks on a concrete base, with pitch and pebble joints, edgestone set, flagging crosswalks laid, and artificial stone sidewalks were constructed on the north side of the street and brick sidewalks on the south side.

Engineering	\$154 84
Inspection	97 12
Engineering expense	6 85
Labor, handling stock	8 13
Advertising	4 30
Edgestone, 779 feet 8 inches straight, 52 feet 11½ inches circular and 1 large corner	597 11
Flagging, 232 feet 8 inches	197 00
Bricks, 5,450	70 85
Blocks, 44,880 old granite	778 18
Cement	44
Teaming	382 16
Gravel, 91 double loads and 65 tons	179 40
Labor, employees filling sidewalks	9 75
Labor, employees repaving gutters	42 75
Labor, employees filling roadway	172 26

Amount paid to Coleman Brothers, under contract:

480 linear feet straight edge- stone hauled and set @ 20c.	\$96 00	
75 linear feet circular edge- stone set @ 20c.	15 00	
921 linear feet existing edge- stone reset @ 15c.	138 15	
338 square yards existing gran- ite block paving relaid, gravel joints, @ 50c.	169 00	
3,848 square yards granite block paving furnished and laid, pitch joints, includ- ing concrete base, @ \$3.65	14,045 20	
56 square yards existing gran- ite block relaid, pitch joints, @ \$1	56 00	
49 square yards flagging crosswalks hauled and laid, pitch joints, includ- ing concrete base, @ \$1.80	88 20	
19 square yards existing flag- ging crosswalks relaid, pitch joints, @ \$1	19 00	
6 square yards existing flag- ging crosswalks relaid, pitch joints, including concrete base, @ \$1.75	10 50	
162 square yards brick side- walks laid @ 30c.	48 60	
8,960 square feet artificial stone sidewalks furnished and laid @ 16c.	1,433 60	
15 covers reset @ \$3	45 00	
<i>Carried forward</i>	\$16,164 25	\$2,701 14

<i>Brought forward</i>	\$16,164 25	\$2,701 14
Drill bar and remove old wall:		
510 hours' labor @ 25c.	127 50	
Plus 15 per cent on \$127.50	19 13	
20 hours, double team, @ 75c.,	15 00	
Extra work — Chip grout from old paving blocks:		
184 hours' labor @ 25c.	45 00	
Plus 15 per cent on \$45	6 90	
Extra work — Repair street as directed over settlement:		
8 hours, foreman, @ 50c.	4 00	
6 hours, paver, @ 62½c.	3 75	
56 hours' labor @ 25c.	14 00	
Plus 15 per cent on \$21.75,	3 26	
4 hours, double team, @ 75c.	3 00	
2 tons crushed stone @ \$1.50	3 00	
2 bbls. Portland cement @ \$2	4 00	
	<u>\$16,413 79</u>	
Less amount charged to Paving Service appropriation	4,103 45	
	<u>12,310 34</u>	
		<u>\$15,011 48</u>

Puritan avenue, from Richfield street to unnamed street. (Work not started.)

Engineering	\$73 55
Engineering expense	1 00
Advertising	5 97
	<u>\$80 52</u>

Quincefield street, between Humphreys and Wendover streets. Length, 263 linear feet. Area, 672 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$123 19
Inspection	38 50
Engineering expense	1 85
Advertising	6 96
Labor, handling stock	21
Edgestone, 23 feet 11 inches straight, 27 feet 5½ inches circular	47 88
Blocks, 5,895 old granite	76 74
Amount paid to James Doherty, under contract:	
Removing trees, bushes, stumps, etc.	\$5 00
274 cubic yards earth excavation @ 60c.	164 40
14 linear feet straight edgestone hauled and set @ 22c.	3 08
<i>Carried forward</i>	<u>\$172 48</u>
	<u>\$295 33</u>

<i>Brought forward</i>	\$172 48	\$295 33
28 linear feet circular edge-stone set @ 15c.	4 20	
388 linear feet existing edge-stone reset @ 14c.	54 32	
173 square yards granite block paving hauled and laid @ 63c.	108 99	
14 square yards existing granite block paving relaid @ 50c.	7 00	
18 square yards existing flagging crosswalks relaid @ 50c.	9 00	
471 square yards tar macadam surface furnished and placed @ 90c.	423 90	
2,016 square feet artificial stone sidewalks furnished and laid @ 15½c.	307 44	
2 covers reset @ \$3	6 00	
Extra work — Cut gutter-mouth in catch-basin stone:		
8 hours, stonecutter, @ 62½c.	5 00	
Plus 15 per cent on \$5	75	
		1,099 08
		<u>\$1,394 41</u>

Rexhame street, from Belgrade avenue to Colberg avenue. (Work not started.)

Engineering	\$52 25
Engineering expense	40
Advertising	4 20
	<u>\$56 85</u>

Roach street, between Dorchester avenue and Pleasant street. Length, 434 linear feet. Area, 965 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed. (Unfinished.)

Engineering	\$101 59
Inspection	87 50
Engineering expense	4 75
Advertising	6 06
Labor, handling stock	12 20
Edgestone, 785 feet 3 inches, 37 feet 8 inches circular	563 47
Flagging, 22 feet	17 46
Blocks, 7,650 old granite	139 00
Amount paid to James Doherty, under contract:	
Removing trees, bushes, stumps, etc.	\$5 00
470 cubic yards earth excavation @ 65c.	305 50
½ cubic yards rock excavation @ \$3	2 00
<i>Carried forward</i>	\$312 50
	\$931 73

<i>Brought forward</i>	\$312 50	\$931 73
788 linear feet straight edge-stone hauled and set @ 21c.	165 48	
38 linear feet circular edge-stone set @ 17c.	6 46	
77 linear feet existing edge-stone reset @ 14c.	10 78	
279 square yards granite block paving hauled and laid @ 61c.	170 19	
39 square yards existing granite block paving relaid @ 45c.	17 55	
5 square yards flagging crosswalks hauled and laid @ 80c.	4 00	
12 square yards existing flagging crosswalks relaid @ 50c.	6 00	
695 square yards tar macadam surface furnished and placed @ 89c.	618 55	
3,500 square feet artificial stone sidewalks furnished and laid (unfinished) @ 7c.	245 00	
4 covers reset @ \$3	12 00	
	\$1,568 51	
Less 15 per cent retained,	235 28	
	1,333 23	
		\$2,264 96

Sachem street, between Hillside street and Parker Hill avenue. Length, 909 linear feet. Area, 3,369 square yards. Six-inch water-bound macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and brick sidewalk laid.

Engineering	\$152 31
Inspection	126 00
Engineering expense	3 60
Labor, handling blocks	8 41
Edgestone, 218 feet 2 inches straight, 281 feet circular	489 16
Flagging, 523 feet 4 inches	418 66
Blocks, 6,300 old granite	120 40
Bricks, 57,700	750 10
Steam roller	6 50
Labor on catch-basins and manholes	18 00
Amount paid to John McCourt & Co., under contract:	
Removing trees, bushes, stumps, etc.	\$0 01
2,180 cubic yards subgrading (earth excavation) @ 50c.	1,090 00
2 cubic yards subgrading (rock excavation) @ \$3,	6 00
1,207 linear feet straight edge-stone hauled and set @ 20c.	241 40
<i>Carried forward</i>	\$1,337 41
	\$2,093 14

<i>Brought forward</i>	\$1,337 41	\$2,093 14
480 linear feet circular edge-stone set @ 14c.	67 20	
433 linear feet existing edgestone reset @ 15c.	64 95	
662 square yards granite block paving hauled and laid @ 70c.	463 40	
105 square yards existing granite block paving relaid @ 45c.	47 25	
113 square yards flagging crosswalks hauled and laid @ \$1	113 00	
2,469 square yards macadam surface furnished and placed @ 73c.	1,802 37	
1,263 square yards brick sidewalks laid @ 33c.	416 79	
26 square yards existing brick sidewalks relaid @ 25c.	6 50	
7 covers reset @ \$3	21 00	
Concrete retaining wall furnished and built	1,325 00	
346 linear feet wood fence furnished and built @ 50c.	173 00	
482 linear feet ground water drains furnished and laid @ 35c.	168 70	
Extra work — Relay existing flagging crosswalks where directed:		
20 square yards existing flagging crosswalks relaid @ 65c.	13 00	
Extra work — Haul gutter blocks from Brighton Paving Yard:		
89½ tons gutter blocks hauled, one and one-half (1½) miles overhaul, per half-mile per ton @ 11c.	29 45	
	\$6,049 02	
Less amount paid in 1912,	2,379 92	
	3,669 10	
		\$5,762 24

Seaver street, at Walnut avenue. (Work done in 1912.)

Engineering	<u>\$8 50</u>
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Sheffield road, between Walter and Selwyn streets. Length, 706 linear feet. Area, 2,040 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed. (Work unfinished.)

Engineering	\$115 81
Inspection	119 00
Engineering expense	1 40
Advertising	5 96
Labor, handling blocks	21 38

<i>Carried forward</i>	\$263 55
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<i>Brought forward</i>		\$263 55
Edgestone, 1,368 feet 9 inches straight, 18 feet 10 inches circular and 2 small corners		932 69
Flagging, 55 feet		42 90
Blocks, 18,115 old granite		362 30
Amount paid to William J. Rafferty Company, under contract:		
1,071 cubic yards earth excavation @ 65c.	\$696 15	
1,370 linear feet straight edgestone and corners hauled and set @ 30c.	411 00	
19 linear feet circular edgestone set @ 15c.	2 85	
23 linear feet existing edgestone reset @ 12c.	2 76	
475 square yards granite block paving hauled and laid @ 75c.	356 25	
8 square yards existing granite block paving relaid @ 40c.	3 20	
12 square yards flagging crosswalks hauled and laid @ \$1.50	18 00	
1,538 square yards tar macadam surface furnished and placed @ 95c.	1,461 10	
8,800 square feet artificial stone sidewalks furnished and laid @ 16c.	1,408 00	
62 square feet artificial stone driveways furnished and laid @ 16c.	9 92	
6 covers reset @ \$3	18 00	
	\$4,387 23	
Less 15 per cent retained,	658 08	
	3,729 15	
		<u>\$5,330 59</u>

Silloway street, between Melville avenue and Mather street. Length, 382 linear feet. Area, 1,142 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed, with loam spaces.

Engineering	\$36 12
Inspection	45 50
Engineering expense	40
Labor, handling stock	10 35
Blocks, 8,725 old granite	107 30
Edgestone, 690 feet straight, 9 feet 4 inches circular	494 20
Amount paid to James Doherty, under contract:	
Removing trees, bushes, stumps, etc.	\$5 00
303 cubic yards earth excavation @ 50c.	151 50
<i>Carried forward</i>	\$156 50
	\$693 87

<i>Brought forward</i>	\$156 50	\$693 87	
692 linear feet straight edge-stone hauled and set @ 19c.	131 48		
9 linear feet circular edge-stone set @ 13c.	1 17		
12 linear feet existing edge-stone reset @ 13c.	1 56		
232 square yards granite block paving hauled and laid @ 65c.	150 80		
836 square yards tar macadam surface furnished and placed @ 83c.	693 88		
948 square feet artificial stone sidewalks furnished and laid @ 14c.	132 72		
1 cover reset @ \$3	3 00		
117 square yards loam spaces placed and seeded @ 10c., ...	11 70		
		1,282 81	
			<u>\$1,976 68</u>

Southern avenue, from Washington street to Bernard street. (Work done in 1912.)

Amount paid to Jeremiah J. McCarthy, retained under contract for work done in 1912	<u>\$200 00</u>
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Spring street, Webster street to Charles river. (Unfinished.) Length, 1,638 linear feet. Area, 9,828 square yards. Excavating and filling.

Engineering	\$438 75	
Inspection	224 00	
Engineering expense	6 10	
Advertising	6 96	
Amount paid to West Roxbury Trap Rock Company, under contract:		
Removing trees, bushes, stumps, etc. (unfinished)	\$1,000 00	
2,000 cubic yards earth excavation @ 70c.	1,400 00	
14 cubic yards rock excavation @ \$5	70 00	
	\$2,470 00	
Less 5 per cent retained	123 50	
	2,346 50	
		<u>\$3,022 31</u>

St. Lukes road, from Brighton avenue to Commonwealth avenue. (Work not started.)

Engineering	\$37 70	
Engineering expense	35	
Advertising	5 77	
		<u>\$43 82</u>

Stratford street, from Clement avenue to Providence Division Railroad. (Work done in 1912.)

Engineering	<u>\$4 50</u>
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Tellow street, between Worthington street and Tremont entrance of Back Bay Fens. Length, 240 linear feet. Area, 856 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed with a loam space, brick sidewalks relaid.

Engineering	\$113 29
Inspection	143 50
Engineering expense	1 75
Labor, handling stock	24 72
Edgestone, 180 feet straight, 62 feet 10 inches circular	194 22
Flagging, 50 feet	40 00
Bricks, 3,200	41 60
Blocks, 7,000 old granite	133 58

Amount paid to James Doherty, under contract:

Removing trees, bushes, stumps, etc.	\$5 00	
202 cubic yards earth excavation @ 50c.	101 00	
181 linear feet straight edgestone hauled and set @ 30c.	36 20	
63 linear feet circular edgestone set @ 15c.	9 45	
318 linear feet existing edgestone reset @ 12c.	38 16	
165 square yards granite block paving hauled and laid @ 60c.	99 00	
33 square yards existing granite block paving relaid @ 35c.	11 55	
11 square yards flagging crosswalks hauled and laid @ 81c.	8 91	
647 square yards tar macadam surface furnished and placed @ 90c.	582 30	
298 square yards existing brick sidewalks relaid @ 30c., ...	89 40	
1,576 square feet artificial stone sidewalks furnished and laid @ 13½c.	212 76	
2 covers reset @ \$3	6 00	
188 square yards loam spaces placed and seeded @ 9c., ...	16 92	
72 cubic yards loam furnished @ 80c.	57 60	
Extra work—Furnish and place filling as directed:		
238 cubic yards filling furnished and placed @ 65c.	154 70	
		1,428 95
		\$2,121 61

Tucker street, between Lauriat avenue and Callender street. Length, 378 linear feet. Area, 1,091 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$59 08
Inspection	266 00
Engineering expense	1 15
Labor, handling stock	11 21
Edgestone, 692 feet 2 inches	484 51
Flagging, 45 feet 1 inch	36 07
Blocks, 9,735 old granite	197 64
Teaming	2 87

Amount paid to Fred S. & A. D. Gore Corporation, under contract:

Removing trees, bushes, stumps, etc.	\$1 00
364 cubic yards earth excavation @ 50c.	182 00
4 cubic yards rock excavation @ \$3.25	13 00
693 linear feet straight edgestone hauled and set @ 19c.	131 67
6 linear feet circular edgestone set @ 13c.	78
71 linear feet existing edgestone reset @ 13c.	9 23
234 square yards granite block paving hauled and laid @ 67c.	156 78
48 square yards existing granite block paving relaid @ 43c.	20 64
10 square yards flagging crosswalks hauled and laid @ 90c.	9 00
19 square yards existing flagging crosswalks relaid @ 43c.	8 17
807 square yards tar macadam surface furnished and placed @ 85c.	685 95
4,710 square feet artificial stone sidewalks furnished and laid @ 15c.	706 50
2 covers reset @ \$3	6 00

\$1,930 72

Extra work — Raise manhole covers to grade where directed:

2 days, mason, @ \$5	10 00
3½ days, tender, @ \$2.50	8 75
1 day, labor, @ \$2	2 00
Plus 15 per cent on \$20.75, ...	3 11
9 bags Portland cement @ 50c.	4 50
9 cubic feet sand @ 5c.	45
750 sewer brick @ \$12 per M., ...	9 00

1,968 53

\$3,027 06

Tyndale street, between Walworth and Guernsey streets. Length, 1,946 linear feet. Area, 5,795 square yards. Six-inch tar macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid, crushed stone sidewalks laid and artificial stone sidewalks constructed.

Engineering	\$238 59	
Inspection	416 50	
Engineering expense	3 95	
Labor, handling stock	56 13	
Advertising	7 06	
Edgestone, 3,634 feet 5 inches straight, 2 small corners, 262 feet 4 inch circular	2,746 01	
Flagging, 50 feet	44 00	
Blocks, 55,075 old granite	1,071 95	
Teaming	1 50	
Amount paid to Hugh J. McGuire, under contract:		
Removing trees, bushes, stumps, etc.	\$5 00	
2,594 cubic yards earth exca- vation @ 54c.	1,400 76	
10 cubic yards rock excava- tion @ \$3.75	37 50	
3,628 linear feet straight edge- stone hauled and set @ 25c.	907 00	
270 linear feet circular edge- stone set @ 15c.	40 50	
82 linear feet existing edge- stone reset @ 15c.	12 30	
1,323 square yards granite block paving hauled and laid @ \$1.10	1,455 30	
66 square yards existing granite block paving relaid @ 45c.	29 70	
12 square yards flagging crosswalks hauled and laid @ \$1.75	21 00	
11 square yards existing flagging crosswalks relaid @ 75c.	8 25	
4,491 square yards tar macad- am surface furnished and placed @ 80c.	3,592 80	
138 square yards crushed stone sidewalks fur- nished and placed @ 50c.	69 00	
21,815 square feet artificial stone sidewalks furnished and laid @ 14c.	3,054 10	
68 square feet artificial stone driveways furnished and laid @ 14c.	9 52	
28 covers reset @ \$3	78 00	
	10,720 73	
	\$15,306 42	

Vassar street, from Washington street to Kilton street.

Engineering	\$100 36	
Engineering expense	50	
Advertising	5 57	
	\$106 43	

Vaughan avenue, from Geneva avenue to Devon street. (Work done in 1912.)

Engineering expense	\$0 10	
Credit:		
Bricks, 1,700	\$22 10	
Edgestone, 10 feet 6 inches circular	12 60	
		34 70
Net credit		<u>\$34 60</u>

Vesta road, between Blue Hill avenue and Harvard street. Length, 537 linear feet. Area, 1,551 square yards. Six-inch asphalt macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$130 36	
Inspection	115 50	
Engineering expense	4 85	
Advertising	6 66	
Labor, handling stock	13 95	
Labor, stonecutter	18 00	
Teaming	33 02	
Flagging, 10 feet	3 60	
Edgestone, 1,012 feet 2 inches straight	668 03	
Blocks, 10,875 old granite	217 50	
Amount paid to James Doherty, under contract:		
Removing trees, bushes, stumps, etc.	\$5 00	
730 cubic yards earth excavation @ 90c.	657 00	
5 cubic yards rock excavation @ \$3.25	16 25	
610 linear feet straight edgestone hauled and set @ 22c.	134 20	
399 linear feet circular edgestone set @ 15c.	59 85	
54 linear feet existing edgestone reset @ 14c.	7 56	
344 square yards granite block paving hauled and laid @ 75c.	258 00	
13 square yards existing granite block paving relaid @ 45c.	5 85	
13 square yards existing flagging crosswalks relaid @ 50c.	6 50	
1,145 square yards asphalt macadam surface furnished and placed @ 97c.	1,110 65	
3,743 square feet artificial stone sidewalks furnished and laid @ 14½c.	552 09	
8 covers reset @ \$3	24 00	
		2,836 95
		<u>\$4,048 42</u>

Walworth street, between Belgrade avenue and Brook street. Length, 949 linear feet. Area, 3,706 square yards. (Work unfinished.) Six-inch tar macadam roadway constructed, edgestone set, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$152 25
Inspection	232 06
Engineering expense	2 70
Labor, handling stock	27 68
Advertising	6 86
Edgestone, 1,627 feet 4 inches straight, 4 small corners, 120 feet 9 inches circular .	1,233 34
Flagging, 395 feet 1 inch	308 16
Blocks, 5,175, old granite	103 50
Amount paid to Hugh J. McGuire, under contract:	

1,130 cubic yards earth excavation @ 64c.	\$723 20
30 cubic yards rock excavation @ \$3.75	112 50
1,626 linear feet straight edgestone and corners hailed and set @ 25c., ...	406 50
123 linear feet circular edgestone set @ 17c.	20 91
56 linear feet existing edgestone reset @ 15c.	8 40
87 square yards granite block paving hauled and laid @ \$1.10	95 70
45 square yards existing granite block paving relaid @ 50c.	22 50
84 square yards flagging crosswalks hauled and laid @ \$1.85	155 40
29 square yards existing flagging crosswalks relaid @ 75c.	21 75
3,021 square yards tar macadam surface furnished and placed @ 80c.	2,416 80
12,743 square feet artificial stone sidewalks furnished and laid @ 14c.	1,784 02
163 square feet artificial stone driveways furnished and laid @ 14c.	22 82
Extra work — Omit granite block paving for gutters and substitute tar macadam:	
575 square yards tar macadam surface furnished and placed @ 80c.	460 00

\$6,250 50

Less 5 per cent retained,

312 53

5,937 97

\$8,004 52

Wellington Hill street, from Morton street to Blue Hill avenue. (Work not started.)

Engineering	\$661 68
Engineering expense	3 60
Advertising	10 20

\$675 48

Whitfield street, between Wheatland and Talbot avenues. Length, 797 linear feet. Area, 2,365 square yards. Six-inch Burmudez asphalt macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

Engineering	\$142 45	
Inspection	168 00	
Engineering expense	1 95	
Advertising	6 96	
Labor, handling stock	17 47	
Edgestone, 1,159 feet 1 inch straight, 51 feet 4 inches circular and 1 small corner	875 96	
Blocks, 15,880 old granite	295 28	
Amount paid to William J. Rafferty Company, under contract:		
Removing trees, bushes, stumps, etc.	\$0 01	
1,444 cubic yards earth excavation @ 91c.	1,314 04	
3 cubic yards rock excavation @ \$2	6 00	
1,161 linear feet straight edgestone and corners hauled and set @ 21½c.	249 62	
55 linear feet circular edgestone set @ 14c.	7 70	
61 linear feet existing edgestone reset @ 12c.	7 32	
508 square yards granite block paving hauled and laid @ 73c.	370 84	
41 square yards existing granite block paving relaid @ 40c.	16 40	
47 square yards flagging crosswalks hauled and laid @ \$1	47 00	
1,769 square yards asphalt macadam surface furnished and placed @ 95c.	1,680 55	
7,630 square feet artificial stone sidewalks furnished and laid @ 14½c.	1,087 28	
10 covers reset @ \$3	30 00	
	4,816 76	
		<u>\$6,324 83</u>

Wilmore street, from Blue Hill avenue to Norfolk street. (Work not started.)

Engineering	\$70 60	
Engineering expense	90	
Advertising	3 80	
Blocks, 307 old granite	6 14	
		<u>\$81 44</u>

Woodford street, from Magnolia street to Magnolia street. (Work done in 1912.)

Engineering	\$9 84	
Amount paid to Jeremiah J. McCarthy, retained under contract for work done in 1912, ...	349 71	
		<u>\$359 55</u>

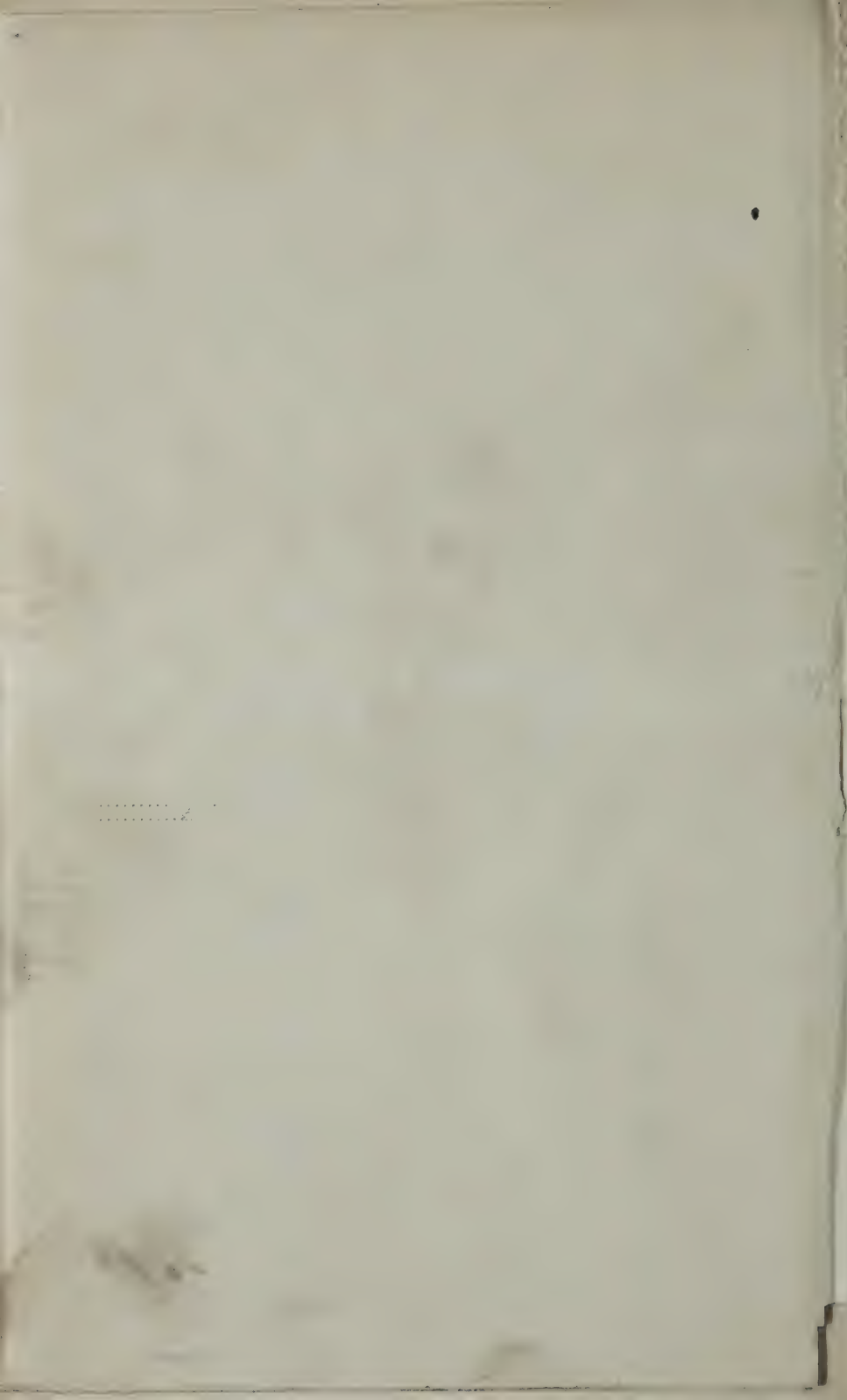
RECAPITULATION OF STREET WORK.

MAINTENANCE.

<i>Academy Hill road</i> , Washington street to Chestnut Hill avenue	\$1,340 28
<i>Adams street</i> , Rozella to south of King street	396 06
<i>Adams street</i> , Winthrop to Common street	624 54
<i>Alban street</i> , Welles avenue to Ashmont street	2,577 69
<i>Alcott street</i> , Franklin street to 100 feet east	144 18
<i>Aldie street</i> , Franklin to Everett street	277 70
<i>Allston street</i> , Washington street to Summit avenue	323 88
<i>Anawan avenue</i> , Beech to Park street	763 84
<i>Armandine street</i> , Milton avenue to Washington street	7,161 22
<i>Ashmont street</i> , Washington street to Dorchester avenue	31 85
<i>Atherton street</i> , Washington to Amory street	1,259 10
<i>B street</i> , West First to West Third street	1,922 64
<i>B street</i> , West First to Cypher street	9 70
<i>Baxter street</i> , D to E street	753 57
<i>Beacon street</i> , Audubon circle to railroad bridge	5,307 87
<i>Beacon street</i> , Brookline avenue to Raleigh street, ...	2,034 17
<i>Beacon street</i> , Charles to Spruce street	2,204 92
<i>Beacon street</i> , Cleveland circle to Brookline line	1,867 20
<i>Beacon street</i> , Massachusetts avenue to Raleigh street	7,321 82
<i>Beethoven street</i> , Washington to Arcadia street	969 56
<i>Bennington street</i> , Chelsea to across Wordsworth street	26,275 52
<i>Bernard street</i> , Harvard to Kerwin street	2,397 63
<i>Blue Hill avenue</i> , Columbia road to Canterbury street	2,060 15
<i>Blue Hill avenue</i> , east side Walk Hill to River street	7,442 98
<i>Blue Hill avenue</i> , west side Harvard to River street, ...	3,128 44
<i>Blue Hill avenue</i> , at Clarkwood and Stratton streets (crosswalk)	473 62
<i>Blue Hill avenue</i> , Washington street to 192 feet south	584 76
<i>Bolton street</i> , B to C street	4 74
<i>Bourne street</i> , at Neponset avenue	170 36
<i>Bowdoin street</i> , Mt. Ida road to Geneva avenue	1,643 68
<i>Carried forward</i>	\$81,473 67

DETAIL OF WORK DONE BY HIGHWAY DIVISION FORCE.

* Cutting down embankment for street and sidewalk, 2,395 cubic yard



<i>Brought forward</i>	\$81,473 67
<i>Bowdoin street</i> , Winter to Quincy street	1,638 65
<i>Brigham street</i> , Webster street to 200 feet south	833 90
<i>Bunker Hill street</i> , Sackville to Mead street	984 18
<i>C street</i> , West Broadway to West First street	2,585 46
<i>Cambridge street</i> , Union square to Allston bridge	3,883 74
<i>Centre street</i> , north side Allston street to railroad	543 44
<i>Centre street</i> , Washington street to railroad	7 90
<i>Centre street</i> , Green to South street	21,188 31
<i>Chelsea Bridge South</i> , approach to	548 00
<i>Chelsea street</i> , Maverick to Day square	413 01
<i>Chestnut avenue</i> , Mozart to Centre street	3,182 96
<i>Chestnut Hill avenue</i> , Winship street to Cleveland circle	2 50
<i>Clarendon street</i> , Stuart street to St. James avenue, ...	326 41
<i>Cohasset street</i> , Corinth to Albano street	1,697 61
<i>Columbia road</i> , Cushing to Davenport avenue	2,792 73
<i>Columbia road</i> , Hamilton to Richfield street	368 06
<i>Columbia road</i> , Quincy street to railroad bridge	1,442 82
<i>Columbus avenue</i> , Dimock to Washington street	3,149 18
<i>Condor street</i> , at foot of Glendon street	138 00
<i>Conway street</i> , South to Fairview street	2,850 72
<i>Cornell street</i> , Washington street to Bellevue avenue	92 72
<i>Denmark street</i> , St. Stephen to Hemenway street	181 55
<i>Dennis street</i> , Dudley to Woodville street	2,616 94
<i>Dorchester avenue</i> , Belfort to Williams street	315 37
<i>Dorchester avenue</i> , Park to Ashmont street	3,928 43
<i>Dorchester avenue</i> , Ralston street to 140 feet south, ...	1,755 16
<i>Draper street</i> , Westville to Bowdoin street	41 65
<i>Dudley street</i> , Washington street to Harrison avenue	1,349 80
<i>E street</i> , West Broadway to West Third street	620 46
<i>East Dedham street</i> , Harrison avenue to Washington street	1,260 57
<i>East Fourth street</i> , G to H street	1,268 34
<i>East Ninth street</i> , K street to Columbia road	4,203 07
<i>Edgeworth street</i> , Bunker Hill to Ferrin street	1,345 03
<i>Elmo street</i> , Blue Hill avenue to Erie street	1,934 79
<i>Elmwood street</i> , Roxbury to King street	1,274 83
<i>Essex street</i> , Commonwealth avenue to Cottage Farm Bridge	787 77
<i>Evelyn street</i> , Blue Hill avenue to Norfolk street	5,479 79
<i>Everett street</i> , Western avenue to North Beacon street	6,214 73
<i>Exchange street</i> , State street to 174 feet north	2,141 88
<i>Fairview street</i> , Conway street to 350 feet east	522 46
<i>Ferrin street</i> , Edgeworth to 75 feet east of Jackson street	1,833 47
<i>Carried forward</i>	\$169,220 06

<i>Brought forward</i>	\$169,220 06
<i>Fisher avenue</i> , Parker to Hayden street	4,750 56
<i>Foss street</i> , Water to Chelsea street	4,805 54
<i>Foster street</i> , Washington to Surrey street	215 52
<i>Francis street</i> , Huntington to Longwood avenue	21 82
<i>Franklin street</i> , Broad to India street	438 53
<i>Franklin street</i> , Easton to Lincoln street	1,423 26
<i>Freeport street</i> , Neponset avenue to Pope's Hill station	5,703 77
<i>Fulton street</i> , Richmond to Lewis street	4,727 10
<i>Gardner street</i> , Centre to Roxbury street	1,052 99
<i>Geneva avenue</i> , Bowdoin to Park street	2,231 07
<i>Germania street</i> , Boylston to Bismarck street	4,400 20
<i>Gold street</i> , D to E street	388 98
<i>Greenwood street</i> , Elmo to Erie street	410 66
<i>H street</i> , East Seventh street to Columbia road	1,851 88
<i>Harrison avenue</i> , Essex to Beach street	45 00
<i>Harvard street</i> , Blue Hill avenue to Morton street, ...	7,507 65
<i>Harvard street</i> , Walk Hill to Oakland street	3,192 93
<i>Harvard street</i> , Washington street to Blue Hill avenue	4,514 94
<i>Hatch street</i> , East Eighth to East Ninth street	386 49
<i>Haverhill street</i> , Sever to Main street	596 09
<i>Hayward place</i> , Washington street to Harrison avenue	1,736 86
<i>Hemenway street</i> , Boylston street to Huntington avenue	75 68
<i>Hollander street</i> , Humboldt avenue to Harold street	91 93
<i>Hollander street</i> , from Humboldt avenue, 200 feet west	2,375 94
<i>Holworthy street</i> , Walnut avenue to Harold street	953 60
<i>Howard street</i> , Gerard to Magazine street	2,543 87
<i>Huntington avenue</i> , Longwood avenue to Gainsborough street	16,846 34
<i>Hyde Park avenue</i> , Eldridge road to Stony brook, ...	3,257 68
<i>Hyde Park avenue</i> , Dana to Glenwood avenue	4,248 20
<i>Hyde Park avenue</i> , Tower to lower Walk Hill street	1,441 62
<i>Hyde Park avenue</i> , West Roxbury line to River street	3,070 76
<i>I street</i> , Broadway to Second street	1,905 87
<i>India square</i> , Broad to India street	463 58
<i>Inwood street</i> , Olney to Norton street	363 94
<i>Jackson street</i> , Bunker Hill to Ferrin street	2,436 79
<i>Judson street</i> , Dean to West Cottage street	469 39
<i>K street</i> , Broadway to the waterfront	4,336 86
<i>Kenneth street</i> , Farrington to Beach street	337 10
<i>Carried forward</i>	\$264,841 05

<i>Brought forward</i>	\$264,841 05
<i>Kinross road</i> , Commonwealth avenue to Sutherland road	1,304 82
<i>L street</i> , bulkhead	4,025 12
<i>L street</i> , East Fourth to East Sixth street	2,609 16
<i>L street</i> , from 200 feet north to 600 feet north of East First street	422 94
<i>Lamartine street</i> , Green to Boylston street	4,646 58
<i>Landseer street</i> , La Grange to Bellevue street	876 35
<i>Lauriat avenue</i> , Norfolk street to Blue Hill avenue, ...	1,199 69
<i>Lime street</i> , River to Brimmer street	1,120 22
<i>Linden street</i> , Cambridge street to Commonwealth avenue	4,532 52
<i>Linnet street</i> , La Grange to Bellevue street	855 25
<i>Loring street</i> , Seventh to Eighth street	374 10
<i>Lyons street</i> , Dorchester avenue to Adams street	83 80
<i>Marcella street</i> , Washington to Ritchie street	425 44
<i>Marvin street</i> , Washington street to Shawmut avenue	2,604 08
<i>Massachusetts avenue</i> , New England Railroad to Edward Everett square	1,353 89
<i>Massachusetts avenue</i> , New England Railroad to Columbia road	6,298 82
<i>Maverick square</i> , Sumner to Maverick street	1,305 92
<i>Maverick street</i> , Border to New street	434 37
<i>Maxwell street</i> , Milton avenue to Capen street	2 00
<i>Medford street</i> , Baldwin to Cook street	22 40
<i>Medford street</i> , Cook to Elm street	2,947 95
<i>Medford street</i> , Elm to Monument street	1,577 52
<i>Metropolitan avenue</i> , Washington to Kittredge street	961 16
<i>Metropolitan avenue</i> , Washington to Poplar street, ...	11,598 24
<i>Milk street</i> , Broad to India street	681 93
<i>Mill street</i> , Adams street to Old Colony Railroad, ...	1,926 27
<i>Milton avenue</i> , Norfolk to Evans street	5,870 08
<i>Milton avenue</i> , Norfolk to Maxwell street	3,337 90
<i>Minot street</i> , Adams street to Neponset avenue	2,872 35
<i>Minot street</i> , Charlemonet to Adams street	3,417 59
<i>Minot street</i> , Neponset avenue to Charlemonet street	5,963 63
<i>Mitchell street</i> , West Ninth street to 190 feet south of West Ninth street	317 42
<i>Morton street</i> , Harvard to Canterbury street	4,792 10
<i>N street</i> , Fifth to Sixth street	724 59
<i>Newbury street</i> , Arlington to Berkeley street	1,422 09
<i>Nightingale street</i> , Wales street to Talbot avenue, ...	717 55
<i>Nightingale street</i> , Wales to Bernard street	5 82
<i>North Beacon street</i> , Vineland street to Charles River Bridge	917 99
<i>Carried forward</i>	\$349,390 70

<i>Brought forward</i>	\$349,390 70
<i>North Harvard street</i> , Western avenue to Charles River Bridge	6,200 45
<i>Park street</i> , City square to Henley street	1,363 37
<i>Park street</i> , Clement to Anawan avenue	3,587 38
<i>Parkman street</i> , North Anderson to North Grove street	521 33
<i>Parsons street</i> , Faneuil to Harriet street	2,628 95
<i>Perkins street</i> , South Huntington avenue to the parkway	1,097 30
<i>Phillips street</i> , Anderson to Grove street	597 97
<i>Phillips street</i> , West Cedar to Grove street	38 25
<i>Pierce street</i> , West street to Fairmount avenue	3,249 59
<i>Pope's Hill street</i> , Neponset avenue to Freeport street	2,050 10
<i>Pope's Hill street</i> , Neponset avenue to Freeport street	811 80
<i>Poplar street</i> , Brown to Metropolitan avenue	957 46
<i>Porter street</i> , Bismarck to Amory street	261 45
<i>Preston street</i> , Mill to Freeport street	1,874 05
<i>Providence street</i> , Berkeley to Clarendon street	81 16
<i>Providence street</i> , 70 feet east of Church to Berkeley street	4,183 73
<i>Quincy street</i> , Columbia road to railroad bridge	684 03
<i>Rawson street</i> , Boston street to Dorchester avenue, ...	1,419 05
<i>Raymond street</i> , Everett to Franklin street	182 77
Rebuilding face of wall at South Yard	950 00
Reconstruction of stable at Hancock Street Yard, ...	7 80
<i>Reed street</i> , Newcomb to Hunneman street	1,610 18
Repairing wall at Fort Hill Wharf	105 33
<i>Richfield street</i> , Barry street to Columbia road	1,953 65
<i>Richmond street</i> , Adams street to Dorchester avenue	973 01
<i>Ritchie street</i> , Marcella to Centre street	1,451 19
<i>River street</i> , Mattapan line to railroad bridge	1,843 67
<i>Rose street</i> , Harrison avenue to Albany street	670 53
<i>Rosedale street</i> , Nos. 7, 9, 10, 12	148 32
<i>Ruggles street</i> , Washington street to Shawmut avenue	5,652 81
<i>Ruth street</i> , Webster to Marginal street	568 15
<i>Sanford street</i> , Washington to Cedar street	7 35
<i>Saratoga street</i> , Bremen to Moore street	1,809 67
<i>Saratoga street</i> , Wordsworth street to Orient Heights	1,483 95
<i>Savin Hill avenue</i> , Dorchester avenue to railroad bridge	1,452 34
<i>School street</i> , Washington to Amory street	1,348 95
<i>Seattle street</i> , Hopedale street to 90 feet north	74 69
<i>Sever street</i> , Cambridge to Haverhill street	1,513 28
<i>Carried forward</i>	\$404,805 76

<i>Brought forward</i>	\$404,805 76
<i>Shepard street</i> , Washington to Union street	198 25
<i>Short street</i> , Bunker Hill to Medford street	455 94
<i>Sleeper street</i> , Congress street to about 650 feet north	8,663 11
<i>South street</i> , Centre to Keyes street	16,632 59
<i>South street</i> , Neponset avenue to Freeport street	1,066 89
<i>South street</i> , Robert to Centre street	2,903 41
<i>Sparhawk street</i> , Cambridge to Market street	2,823 67
<i>Spring street</i> , Allen to Poplar street	1,161 76
<i>St. Alphonsus street</i> , Tremont to Smith street	369 62
<i>St. Alphonsus street</i> , Tremont to Calumet street	31 05
<i>Steps at Hancock Street Yard</i>	1,050 21
<i>St. Stephen street</i> , Massachusetts avenue to Opera place	3,617 06
<i>Summer street</i> , north side B street to viaduct	7,918 08
<i>Sumner street</i> , Annabel to Stoughton street	37 92
<i>Surrey street</i> , Foster to Parsons street	214 67
<i>Thacher street</i> , Endicott to Prince street	656 59
<i>Thorndike street</i> , Washington street to Harrison avenue	1,435 94
<i>Tremont street</i> , Burke to Cunard street	38 15
<i>Tremont street</i> , north side, 350 feet east from St. Alphonsus street	612 37
<i>Tremont street</i> , Winter street to Hamilton place	1,020 77
<i>Tudor street</i> , E to F street	357 47
<i>Union Park street</i> , Harrison avenue to Albany street	1,202 91
<i>Vernon street</i> , Washington street to Shawmut avenue	3,664 77
<i>Walker street</i> , Main to Russell street	1,684 02
<i>Walk Hill street</i> , Harvard street to Blue Hill avenue	49 22
<i>Walnut avenue</i> , Iffley road to beyond Montebello road	761 23
<i>Walnut avenue</i> , Warren street to Humboldt avenue	1,266 08
<i>Walnut street</i> , Franklin to Ericsson street	6,673 85
<i>Waltham street</i> , Harrison avenue to Tremont street, ...	2,471 68
<i>Warren avenue</i> , Berkeley street to Columbus square	47,887 66
<i>Warren street</i> , Cambridge street to Commonwealth avenue	4,717 28
<i>Warren street</i> , Rockland to Townsend street	2,210 29
<i>Warren street</i> , Thompson square to Monument avenue	1,137 02
<i>Washington street</i> , Blue Hill to Talbot avenue	54,952 09
<i>Washington street</i> , Bowdoin to Moultrie street	4 90
<i>Washington street</i> , Cambridge across Market street, ...	23,425 13
<i>Carried forward</i>	\$608,179 41

CHARGED TO APPROPRIATION FOR HIGHWAYS, MAKING OF.

<i>Appian way</i> , Franklin to Raymond street . . .	\$2,820 18
<i>Armington street</i> , Webster street to Brighton avenue	2,467 38
<i>Audubon road</i> , Ivy to Mountfort street . . .	936 58
<i>B street</i> , Fargo to Congress street	504 64
<i>Ballou avenue</i> , Woodrow avenue to Willowwood street	1,164 82
<i>Barrymore street</i> , Blue Hill avenue to Harvard street	2,333 27
<i>Bentham road</i> , Draper street to Robinson avenue, ...	1,656 77
<i>Binney street</i> , Longwood avenue to Francis street, ...	117 92
<i>Brainerd road</i> , Harvard avenue to Warren street, ...	14,560 53
<i>Brookdale street</i> , Florence to Sycamore street	82 98
<i>Brookview street</i> , Blue Hill avenue to Harvard street	4,385 41
<i>Bynner street</i> , South Huntington avenue to Day street	6,064 34
<i>Calumet street</i> , Hillside street to Parker Hill avenue	10,028 11
<i>Chestnut street</i> , Brimmer street to Charles river embankment	60 70
<i>Church street</i> , Boylston to Providence street	2,887 92
<i>Clement avenue</i> , Anawan to Clement avenue	41 34
<i>Clement avenue</i> , Meredith street to Clement avenue	41 34
<i>Clement avenue</i> , Stratford to Park street	3,385 99
<i>Clermont street</i> , Bailey to Fuller street	50 78
<i>Cliftondale street</i> , Kittredge to Norfolk street	9,613 28
<i>Colonial avenue</i> , Talbot to New England avenue, ...	369 69
<i>Cottage street</i> , Gove to Porter street	66 04
<i>Crossman street</i> , Norfolk to West Selden street	2,566 36
<i>Dalrymple street</i> , Egleston to Boylston street	206 36
<i>Daves street</i> , East Cottage to Willis street	2,604 14
<i>Denton terrace</i> , Washington to Kittredge street	72 18
<i>Dexter street</i> , Alford street to Everett line	663 73
<i>Dillaway street</i> , Hollis street to Dix place	50 55
<i>Don street</i> , Woodrow avenue to Callender street, ...	2,598 10
<i>Dumas street</i> , Willowwood to Mascot street	3,865 89
<i>Emmons street</i> , Paris to Chelsea street	2,801 77
<i>Evans road</i> , Corey road to Brookline line	1,472 47
<i>Gayland street</i> , West Cottage to Judson street	799 52
<i>Greenock street</i> , Blue Hill avenue to Harvard street	5,023 29
<i>Hadwin way</i> , Hyde Park avenue to Hammatt road	2,622 96
<i>Hallet street</i> , Minot street to railroad	5,553 42
<i>Carried forward</i>	\$94,540 75

<i>Brought forward</i>	\$94,540 75
<i>Hancock and Bowdoin streets, Winter to Hancock street</i>	6,055 93
<i>Hansborough street, Blue Hill avenue to Harvard street</i>	5,232 76
<i>Harmon street, from Oakland street 90 feet south-westerly</i>	1,266 10
<i>Harold park, from Harold street south</i>	41 02
<i>Haverford street, from Montebello road 100 feet west</i>	31 37
<i>Henshaw street, at Cambridge street</i>	65 90
<i>Holiday street, Bowdoin to Topliff street</i>	6,416 28
<i>Homes avenue, Topliff to Draper street</i>	6,920 73
<i>Howes street, Pleasant street to Dorchester avenue,</i>	2,878 58
<i>Islington street, Webster street to Brighton avenue,</i>	1,109 40
<i>Kenneth street, Farrington to Stratford street</i> (credit \$319.14).	
<i>Kilton street, Park street to Talbot avenue</i>	1,996 73
<i>Kittredge street, Metropolitan avenue to Cornell street</i>	86 78
<i>Lawndale terrace, Lamartine to Amory street</i>	1,760 79
<i>Lithgow street, Washington street to Talbot avenue</i>	2,584 09
<i>Lovering place, Washington street to Harrison avenue</i>	2,416 69
<i>Lubec street, Gove to Porter street</i>	69 75
<i>Maitland street, Beacon street to Boston & Albany Railroad</i>	40
<i>Manthorne road, Weld to Centre street</i>	43 00
<i>Marlowe street, Vinson to Park street</i>	55 87
<i>Marmion street, Montebello road to 112 feet west,</i>	33 02
<i>Mascoma street, Quincy street to Lawrence avenue,</i>	4,021 85
<i>Mascot street, Mountain to Ballou avenue</i>	8,049 69
<i>Maxfield street, Bellevue to La Grange street</i>	5,763 73
<i>Mitchell street, West Ninth street to Old Colony avenue</i>	1,193 89
<i>Montclair avenue, Centre street to northeasterly line of Fletcher street extension</i>	9,607 77
<i>Montebello road, Washington street to Brookside avenue</i>	123 88
<i>Morton street, Blue Hill avenue to beyond Leslie street</i>	858 88
<i>Morton street, west side Greendale road, 607 feet</i>	1 77
<i>Mountfort street, southeasterly of Audubon road to St. Mary's street</i>	3,300 65
<i>Myrick street, Easton street to Coolidge road</i>	54 88
<i>Naples road, Commonwealth avenue to Brookline line</i>	1,107 67
<i>Normandy street, Creston to Intervale street</i>	1,903 89
<i>Carried forward</i>	\$169,594 49

<i>Brought forward</i>	\$169,594 49
<i>Orient avenue</i> , Walley street to beyond Tower street	13,452 65
<i>Perkins street</i> , Prince street to Brookline line	722 20
<i>Pinehurst street</i> , Belgrade to Dudley avenue	102 53
<i>Playstead road</i> , Savin Hill avenue to Springdale street	3,546 71
<i>Potosi street</i> , Mt. Ida road to Percival street	59 99
<i>Priesing street</i> , Chestnut avenue to Mozart street, ...	3,245 73
<i>Providence street</i> , Columbus avenue to about 932 feet southwesterly	15,011 48
<i>Puritan avenue</i> , from Richfield to unnamed street, ...	80 52
<i>Quincefield street</i> , Humphreys to Wendover street, ...	1,394 41
<i>Rexhame street</i> , Belgrade to Colberg avenue	56 85
<i>Roach street</i> , Dorchester avenue to Pleasant street, ...	2,264 96
<i>Sachem street</i> , Hillside street to Parker Hill avenue, ...	5,762 24
<i>Seaver street</i> , at Walnut avenue	8 50
<i>Sheffield road</i> , Walter to Selwyn street	5,330 59
<i>Silloway street</i> , Melville avenue to Mather street, ...	1,976 68
<i>Southern avenue</i> , Washington to Bernard street	200 00
<i>Spring street</i> , Webster street to Charles river	3,022 31
<i>St. Lukes road</i> , Brighton avenue to Commonwealth avenue	43 82
<i>Stratford street</i> , Clement avenue to railroad	4 50
<i>Tellow street</i> , Worthington to Tremont street, entrance to Back Bay Fens	2,121 61
<i>Tucker street</i> , Lauriat avenue to Callender street, ...	3,027 06
<i>Tyndale street</i> , Walworth to Guernsey street	15,306 42
<i>Vassar street</i> , Washington to Kilton street	106 43
<i>Vaughan avenue</i> , Geneva avenue to Devon street (credit \$34.60).	
<i>Vesta road</i> , Blue Hill avenue to Harvard street	4,048 42
<i>Walworth street</i> , Belgrade avenue to beyond Brook street	8,004 52
<i>Wellington Hill street</i> , Morton street to Blue Hill avenue	675 48
<i>Whitfield street</i> , Wheatland to Talbot avenue	6,324 83
<i>Wilmore street</i> , Blue Hill avenue to Norfolk street, ...	81 44
<i>Woodford street</i> , Magnolia to Magnolia street	359 55
	\$265,936 92
Less credits	353 74
Total	<u>\$265,583 18</u>

PUBLIC WORKS DEPARTMENT — HIGHWAY DIVISION — PAVING SERVICE.

Maintenance of Macadam Streets.

Schedule of Amounts Resurfaced and Cost of Same for Years Ending February 1, 1907, to January 31, 1914.

	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Length of macadam in miles.....	346.02	348.62	350.85	353.81	358.35	381.41	388.32
Total area of macadam in square yards.....	6,348,389	6,406,246	6,436,823	6,480,706	6,543,978	6,945,748	7,032,309
Total cost of maintenance of macadam *.....	\$480,607 27	\$340,822 36	\$421,420 66	\$383,004 11	\$328,118 57	\$370,040 49	\$482,070 30
Cost per mile over entire mileage *.....	\$1,389 00	\$977 62	\$1,201 14	\$1,082 51	\$915 63	\$970 19	\$1,241 43
Cost per square yard over entire area *.....	\$0 08	\$0 053	\$0 065	\$0 059	\$0 05	\$0 053	\$0 069
Length of macadam resurfaced yearly in miles.....	20.9	22.2	43.1	36.7	23.3	31.9	25.6
Cost per mile of macadam resurfaced yearly.....	\$17,742 00	\$11,705 13	\$7,726 90	\$7,756 18	\$10,014 56	\$8,828 07	\$14,741 36
Area of macadam resurfaced yearly in square yards.....	392,670	406,438	582,267	480,110	307,774	391,708	370,906
Cost per square yard of resurfacing over yearly area.....	\$0 95	\$0 639	\$0 572	\$0 593	\$0 758	\$0 719	\$1 002
Cost per square yard of street cleaning over entire macadam area.....	\$0 0173	\$0 01264	\$0 0137	\$0 0152	\$0 0145	\$0 0127	\$0 0149
Percentage of maintenance and street improvements appropriations used for maintenance of macadam *.....	39.5%	33.7%	33.6%	30.4%	26.3%	28.2%	34.6%

* Including street cleaning by Paving Service.

New Edgestones. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Setting. Linear Feet.

YEAR.	South Boston.	East Boston.	Charlestown.	Brighton.	West Roxbury.	Dorchester and Hyde Park.	Roxbury.	City Proper.	Totals.
1905.....	2,049	1,494	.....	1,867	6,056	13,548	1,814	4,705	31,533
1906.....	2,078	628	.....	261	4,203	15,119	2,307	.....	24,596
1907.....	414	1,263	250	908	349	4,781	1,663	534	10,162
1908.....	656	798	.....	2,405	2,399	3,654	4,811	813	15,536
1909.....	723	2,898	.....	214	779	4,833	2,380	5,253	17,080
1910.....	328	1,182	100	983	5,190	8,044	6,810	50	22,687
1911.....	1,718	465	.....	2,098	11,627	14,627	5,806	352	36,693
1912.....	6,045	1,017	229	1,806	7,890	9,669	3,168	407	30,231
1913.....	2,199	557	70	1,221	2,907	10,296	2,716	1,359	21,325
Totals...	16,210	10,302	649	11,673	41,400	84,571	31,475	13,473	209,843

New Brick Sidewalks. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Laying. Square Yards.

YEAR.	South Boston.	East Boston.	Charlestown.	Brighton.	West Roxbury.	Dorchester and Hyde Park.	Roxbury.	City Proper.	Totals.
1905.....	1,186	1,980	.....	202	103	4,140	790	400	8,801
1906.....	934	699	.....	106	.....	1,758	899	328	4,724
1907.....	455	1,157	223	250	278	856	296	313	3,828
1908.....	217	836	.....	.....	400	958	884	.....	3,295
1909.....	311	2,597	.....	.....	156	406	5,359	.....	8,829
1910.....	1,292	974	42	166	987	596	2,230	.....	6,287
1911.....	520	364	.....	.....	.....	460	1,469	314	3,127
1912.....	2,249	623	.....	.....	.....	208	716	.....	3,796
1913.....	490	465	.....	.....	80	103	647	86	1,871
Totals...	7,654	9,745	265	724	2,004	9,685	13,290	1,441	44,558

Recapitulation, 1912.

	Edgestones. <i>Linear Feet.</i>	Brick. <i>Square Yards.</i>
South Boston Paving District No. 1.....	2,199	490
East Boston Paving District No. 2.....	557	465
Charlestown Paving District No. 3.....	70	.....
Brighton Paving District No. 4.....	1,221	.....
West Roxbury Paving District No. 5.....	2,907	80
Dorchester and Hyde Park Paving Districts Nos. 6, 9-11.....	10,296	103
Roxbury Paving District No. 7.....	2,716	647
City Proper Paving Districts Nos. 8 and 10..	1,359	86
Totals.....	21,325	1,871

Loads of Dirt and Street Cleanings Removed from February 1, 1913,
to January 31, 1914.*By Paving Service.*

DISTRICTS.	Single.	Double.	Cubic Yards.
South Boston.....	732	571	1,874
East Boston.....	206	20	246
Charlestown.....	368	26	420
Brighton.....	3,018	3,781	10,580
West Roxbury.....	6,508	4,507	15,522
Dorchester.....	753	1,300	3,353
Roxbury.....	5,201	3,090	11,381
South End.....	821	566	1,953
Ashmont.....	3,045	1,323	5,691
North End.....	1,114	536	2,186
Hyde Park.....	2,364	497	3,358
Totals.....	24,130	16,217	56,564

Loads of Snow Removed from February 1, 1913, to January 31, 1914.

DISTRICTS.	Single.*	Double.†	Cubic Yards.	Cost.‡
South Boston.....	847	72	1,910	\$2,687 81
East Boston.....	362	26	802	1,545 16
Charlestown.....	290	86	838	3,053 28
Brighton.....	14	10	58	1,993 40
West Roxbury.....	716	459	2,809	3,698 10
Dorchester.....	485	216	1,618	2,828 61
Roxbury.....	408	42	942	4,571 92
South End.....	1,843	434	4,988	5,120 73
Ashmont.....	134	59	445	927 29
North End.....	860	.....	1,720	3,521 56
Hyde Park.....	.....	.....	.....	665 51
Totals.....	5,959	1,404	16,130	\$30,613 37

* Single loads, 2 cubic yards.

† Double loads, 3 cubic yards.

‡ Includes cost of plowing gutters, cleaning sidewalks and picking ice not carted away.

Snow Removed by Contract.*

DISTRICTS.	Number of Loads.†	Cubic Yards.	Cost per Cubic Yard.	Total Cost.
Snow District No. 1.....	371	1,120	\$0 43	\$481 60
Snow District No. 3.....	410	1,644	47	772 68*
Snow District No. 4.....	697	2,313	42	971 46
Snow District No. 5.....	328	1,103½	49	540 72
Totals.....	1,806	6,180½	\$0 452	\$2,766 46

* Only this amount paid out of 1913 appropriation.

† The capacity of the loads varies from two (2) cubic yards to four (4) cubic yards.

Summary of Volume and Cost of Snow Removed, Year Ending January 31, 1914.

WORK DONE BY	Districts.	TEAMS.		TOTAL TEAMS.		Cubic Yards.	Total Cubic Yards.	Cost.	Total Cost.	TOTAL COST PER CUBIC YARD.	
		Single.	Double.	Single.	Double.					Cost per Cubic Yard.	Not Including Paving Service, Day Work.
Paving Service, Day Work.	South Boston.....	847	72			1,910		\$2,687 81			
	East Boston.....	362	226			802		1,545 16			
	Charlestown.....	290	86			838		3,053 23			
	Brighton.....	14	10			58		1,993 40			
	West Roxbury.....	716	459			2,809		3,698 10			
	Dorchester.....	488	216			1,618		2,828 61			
	Roxbury.....	408	42			942		4,371 92			
	South End.....	1,843	434			4,988		5,120 73			
	Ashmont.....	134	59			445		927 29			
	North End.....	860				1,720		3,521 56			
	Hyde Park.....			1 5,959	2 1,404		16,130	665 51	\$30,613 37		
Paving Service, Contracts.	Snow District No. 1.....		371			1,120		\$481 60		\$0 43	
	Snow District No. 3.....		410			1,644		4,772 68		47	
	Snow District No. 4.....		697			2,313		971 46		42	
	Snow District No. 5.....		328			1,103 1/2		540 72		49	\$0 452
							6,180 1/2		\$2,766 42		
Street Cleaning Service, Day Work.	South Boston.....	792				2,059		\$1,392 11		\$0 67	
	East Boston.....	843				2,192		391 13		18	
	Charlestown.....	382				993		558 88		56	
	Dorchester.....	392				1,019		524 51		51	
	Roxbury.....	402				1,045		405 97		38	
	South End.....	337				876		901 23		1 08	
	North and West End.....	5,048				12,125		13,186 34		1 02	
	Back Bay.....	887				2,306		660 31		28	
	Patrol System.....	522				1,357		2,199 40		1 62	
				9 9,605			24,972		7 \$20,219 88		70
Totals (Exclusive of Paving Service, Day Work.)				9,605							
Totals (Inclusive of Paving Service, Day Work.)				9,605	1,806		31,152 1/2		\$22,986 30		\$0 576
				15,564	3,210		47,282 1/2		\$53,599 67		

1 Single loads, 2 cubic yards.

2 Double loads, 3 cubic yards.

3 Capacity of loads varies from 2 to 4 cubic yards.

4 Only this amount paid out of 1913 appropriation.

5 Includes cost of plowing gutters, cleaning sidewalk and picking ice not carted away.

6 Street cleaning, branch loads, 2.60 cubic yards.

7 Includes Sunday, paid time and one-half and holidays paid double time.

STREET OPENINGS.

Under classes 1 and 2 of the schedule of permit fees, permits for openings in public ways were issued as follows:

NAME.	Permits.	Length in Feet.
City of Boston Fire Department.....	111	7,125
City of Boston Lamp Service.....	71	460
City of Boston Police Department.....	16	640
City of Boston Schoolhouse Commission.....	18	2,460
City of Boston Sewer Service.....	448	26,653
City of Boston Water Service.....	2,244	55,084
Boston Consolidated Gas Company.....	2,206	36,156
Boston Elevated Railway Company.....	356	78,090
Charlestown Gas and Electric Company.....	182	3,578
Dedham and Hyde Park Gas and Electric Company.....	79	3,560
East Boston Gas Company.....	230	14,565
Edison Electric Illuminating Company.....	4,342	425,711
New England Telephone and Telegraph Company,	501	70,975
Miscellaneous.....	3,611	278,825
Emergency, Class A.....	844	.....
Emergency, Class A, returned as used.....	437	.....
Estimated length.....	.....	10,925
Totals.....	15,696	1,014,807

Making a total length of openings of about 192 miles, an increase of fifty-two miles from the previous year.

Permits for occupation of public ways for purposes other than openings have been issued as follows:

Advertising by men wearing lettered hat and coat .	59
Cleaning snow from roof	45
Driving cattle through the streets	11
Dumping snow in public alleys	23
Erecting and repairing awnings	1,370
Erecting and repairing buildings	3,773
Painting or minor repairs	4,223
Feeding horses on streets	955
Moving buildings in the streets	27
Placing signs flat in buildings	1,308
Projecting signs or lamps	393
Raising or lowering safes or heavy machinery	243
Loading and unloading goods	2
Emergency permits (Class B)	274
<i>Carried forward</i>	12,706

<i>Brought forward</i>	12,706
Special permits for other than the above purposes	51
Annual permits for other purposes	427
Total	13,184
Total for openings in public ways	15,696
Total of all permits issued	<u>28,880</u>

* The income from the issuance of permits amounted to \$32,258.03, divided as follows:

Class No. 1.	Openings	\$8,096 00
2.	Emergency openings	524 50
3.	Advertising	26 00
4.	Cleaning snow from roofs	45 00
5.	Driving cattle	55 00
6.	Dumping snow	11 50
7.	Erecting and repairing awnings	685 00
8.	Erection, alteration and repairs on buildings	16,744 28
9.	Minor repairs on buildings	2,113 00
10.	Feeding horses	955 00
11.	Moving buildings	355 00
12.	Painting signs on fences	0 00
13.	Placing flat signs	654 00
14.	Projecting signs, etc.	393 00
15.	Raising and lowering	243 00
16.	Loading and unloading	7 00
17.	Emergency, Class B	274 00
18.	Special	12 75
19.	Annual permits	1,064 00
Total		<u>\$32,258 03</u>

SIDEWALK DEFECTS.

One thousand two hundred and ninety-eight (1,298) notices were sent to property owners to make repairs on sidewalks for the maintenance of which they were responsible. These included steps, fences, portions of buildings encroaching on sidewalks and defective bulkheads, area covers, etc.

* \$25,088.62 cash paid in to City Collector. Bills sent to City Collector for collection of balance, \$7,169.41.

ROADWAY DEFECTS.

Twenty-three thousand seven hundred and fifty-seven (23,757) notices were sent out to district foremen, contractors, public service corporations and others to make repairs in the streets where defects existed on account of operations for which they were responsible. One hundred and eighty-two (182) notices were sent departments, corporations and others to perform work under the direction of the Paving Service, made necessary by construction or resurfacing of streets by the Paving Service.

POLES.

Permits have been issued for the placing of 181 poles in the public ways in accordance with plans filed in the Permit Office. Permits have been issued for removal of 344 poles and for the resetting of 1,058 defective or unsafe poles.

BONDS.

There are on file in the Permit Office seventeen hundred (1,700) bonds covering the issuance of permits and maintenance of certain structures.

STREET NUMBERING.

Building numbers have been assigned as listed below:

	Entire Streets Num- bered.	Entire Streets Renum- bered.	Partly Num- bered Streets.	Partly Renum- bered Streets.	Estates Num- bered.	Estates Renum- bered.	Figures Issued.
East Boston.....		1	3		103	12	325
Charlestown.....					16		38
Boston.....		1	6		277	45	914
South Boston.....			3		90		259
Dorchester.....		2	13	2	534	87	1,556
Roxbury.....		3	9		203	74	710
West Roxbury.....		3	7		338	76	980
Brighton.....	2	2	15	1	362	79	1,087
Hyde Park.....		9		3	91	104	502
Totals.....	2	21	56	6	2,014	477	6,371

PLANS.

During the year plans were filed as follows:

	Pole..	Track.	Conduit.
New England Telephone and Telegraph Company.....	76	.....	75
Edison Electric Illuminating Company.....	52	.....	587
Boston Elevated Railway Company.....	17	18	16
Hyde Park Gas and Electric Light Company.....	.....	.....	12
Charlestown Gas and Electric Company.....	.....	.....	5
East Boston Gas Company.....	.....	.....	4
Boston Consolidated Gas Company.....	.....	.....	22
Postal Telegraph Cable Company.....	.....	.....	8
Bay State Street Railway Company.....	1	3	.....
Western Union Telegraph Company.....	1	.....	.....
Boston Low Tension Wire Association.....	.....	.....	1
American Telephone and Telegraph Company.....	1	.....	.....
Boston Fire Department.....	96	.....	.....
Boston Police Department.....	1	.....	8
Totals.....	245	21	738

Poles, 245; tracks, 21; conduits, 738; miscellaneous, 43; total of 1,047 plans filed this year, making a total of plans on file of 11,628.

LIST OF STREETS WITH SMOOTH PAVEMENT.

For list of streets having a smooth pavement see pamphlet published separately.

TABLE SHOWING THE UNIT COST OF ASPHALT AND BITULITHIC REPAIRS PER SQUARE YARD OF STREET SURFACE FROM 1904 TO 1913, INCLUSIVE.

Trinidad Asphalt.

City Proper.

STREET.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Albany street.....	80 feet north of Broadway, across Way street.	1899	*	.....	.....	\$0.009	.....	\$0.005	.....	.....	.....	.....
Albany street.....	East Concord street to 225 feet north of Massachusetts avenue.	1884	\$0.029	\$0.082	\$0.055	.086	\$0.124	.401	\$0.346	\$0.284	\$0.235	\$0.150
Arch street.....	Franklin street to Milk street.....	1893	.091	.057	.062	† .082	.....	.....	.....	.....	.....	.....
Arch street.....	200 feet south of Milk street to Franklin street.	1893	.....	.....	.....	.....	.329	.145	†	.....	.....	.....
Arlington street.....	Boylston street to Beacon street.....	1901	.....	.....	.....	.....	.....	.....	.....	* .010	.002	.014
Ash street.....	Bennet street to Nassau street.....	1887	.033	†	.....	.....	.....	†	.....	.....	.....	.....
Avon street.....	Washington street to Chauncy street..	1901	.....	.....	.....	.....	.....	.....	.....	* .028	.023	.146
Barton court.....	Barton street to Brighton street.....	1894	†	.....	.....	.....	.....	.....	.....	.....	.....	.....
Batterymarch street.....	Milk street to Liberty square.....	1896	.247	.004	.008	.070	.030	.013	.060	.196	.319	.043
Beacon street.....	Charles street, across Arlington street,	1891	.043	.048	.049	.107	† .062	.....	.....	.....	.....	.....
Beacon street.....	Charles street to Brimmer street.....	1891	.....	.....	.....	.....	.109	.064	.074	.192	.....	.053
Beacon street.....	Charles street to Brimmer street and southerly side to Arlington street.	1891-1901	.....	.....	.....	.....	.....	.....	.....	.....	.046	.....
Beacon street.....	Easterly side of Dartmouth street to within 150 feet of westerly line of Gloucester street.	1892	.060	.013	.036	.063	.084	† .028	.....	.....	.....	.....

* Guaranty expired in this year.

† Repaved in this year.

‡ Westerly side repaved in this year.

Cost of Trinidad Asphalt Repairs, 1904-13.—Continued.

City Proper.—Continued.

Street.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Dartmouth street.....	Buckingham street to 101 feet north- erly.	1899	.....	*	\$0.019	.....	.....	.....	.....	.....	.....	.....
Davis street.....	Washington street to Harrison avenue,	1892	\$0.010	\$0.082	.060	\$0.081	\$0.100	\$0.173	\$0.332	\$0.184	\$0.680	\$0.106
Devonshire street.....	Milk street to Water street.....	*1909	.....	.....	.....	.....	.....	.....	*	.056	.099	.459
Dillon street.....	Lenox street to Sawyer street.....	1902	.....	.....	.....	.....	.....	.....	.....	.....	*	.010
Doane street.....	Kilby street to Broad street.....	1891	.103	.043	.....	.058	.307	.055	†.189	.031	.224	.058
Edinboro' street.....	Essex street to Beach street.....	1895	.021	.113	.086	.061	.068	.170	.093	.377	†.229	.....
Endicott street.....	Cooper street, across Thacher street..	1809	.....	.....	.....	.....	.....	*	.154	.177	.163	.278
Exchange place.....	Congress street to Kilby street.....	1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ferdinand street.....	At Castle square.....	1889	*	.....	.....	.....	.....	.....	.....	.....	.....	.....
Groton street.....	Washington street to Shawmut avenue,	1892	.028	.....	.031	.022	.045	.045	.115	.041	.079	.031
Hanover avenue.....	Hanover street to North street.....	1892	.006	.060	.059	.028	.237	.102	.029	.222	.209	.107
Harrison avenue.....	22 feet south of Kneeland street to 22 feet north of Harvard street.	1899	.....	.....	.....	.....	.....	*	.271	.250	.189	.211
Harrison avenue.....	East Newton street to East Springfield street.	1888-95	.017	.068	.115	.221	.369	.233	.291	.258	.378	.081
Harrison avenue.....	Asylum street, across Davis street....	1901	.....	.....	.....	.....	.....	.....	.....	*.231	.327	.150
Harrison avenue.....	Northerly side Union Park street, across Malden street.	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*.193
Harrison avenue.....	East Springfield street to 90 feet south- erly.	1888	.017	.....	.....	.195	.880	.078	.208	.....	.080	.216

Hollis street.	1891	.150	.051	.071	.173	.092	.073	.227	.295	.072	.080
Tremont street, toward Washington street.											
Bench street to 90 feet north of Curve street (minus Kneeland and Harvard streets intersection).	1891	.037	.068	.132	.149	.175	.142	.178	.358	.224	.188
Huntington avenue.	1901								* .037	.033	.069
Boylston street, across Dartmouth street.											
Liberty square.	1881										
Kilby street.	1881-98	.030	.056	.224	.149	† .010	.016	.040	.045	.028	.012
Kilby street.											
Central street to Milk street (including Liberty square).											
Washington street to Harrison avenue.	1896		.027	.054	.056	.157	.018	.224	.013	.117	.048
Laconia street.											
La Grange street.	1897	.100	.068	.132	.110	.180	.074	.160	.216	.147	.333
Tremont street, toward Washington street.											
Lincoln place.	1897			.024		.037	.021		.242		
Worcester street to Springfield street. .											
Mt. Vernon street to Chestnut street. .	1892		.065		.101	.128	.104			†	.666
Washington street to Harrison avenue.	1902									* .004	.034
449 feet south of West street to 22 feet north of Avery street.	1909							† .063	.113	.193	.190
Mason street.											
Tremont street to Avery street.	1900							*	.189	.064	.042
Columbus avenue to Tremont street (southerly roadway).	1892	.031	.034	.019	.073	.088	.070	† .070			
Tremont street to Shawmut avenue (southerly roadway).	1892	.031	.017	.015	.019	.063	.045	† .017			
Shawmut avenue to Washington street (southerly roadway).	1892	.031	.013	.048	.043	.200	.021	† .066			
North square to Lewis street.	1891		.060	.096	.035	.150	.105	.083	.189	.248	.073
North Bennet street.	1883	†									
Hanover street to Salem street.											

* Guaranty expired in this year.

† Repaved in this year.

† Part repaved in this year.

Cost of Trinidad Asphalt Repairs, 1904-13.—Continued.

City Proper.—Concluded.

STREET.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
North Margin street.	Stillman street to Thatcher street.	1895	\$0.015	\$0.029	\$0.032	\$0.008	\$0.114	\$0.005	\$0.024	\$0.142	\$0.085	\$0.105
Oxford street.	Beach street to Essex street.	1895	.006	.096	.049	.076	.159	.107	.285	.227	.247	.182
Parkman street.	North Anderson street, across Bos- som street.	1898	.....	.....	.007	.034	.020	.....	.044	.032	.013	.058
Parmenter street.	Hanover street to Salem street.	1893	.....	.....	.....	.....	.....	.....	.....	.....	* .006	.213
Pineknay street.	Charles street, across Brimmer street. .	1895	.032	.015	.089	.096	.248	.056	.147	.172	.036	.056
Pine street.	Washington street to Harrison avenue.	1896	.....	.081	.015	.032	.037	.040	.055	.052	.142	.031
Pleasant street.	Tremont street to Shawmut avenue. . .	1900	.....	*	.648	1.717	.314	.399	.557	.402	.605	.024
Poplar street.	Chambers street to Charles street. . . .	1887-92	.032	.057	.050	.101	.217	.022	.071	.144	.172	.102
Public Alley No. 415.	Between Beacon street and Marl- borough street, from Hereford street to Gloucester street.	1901	.....	.....	.....	.....	.....	.....	.....	*	.....	.001
Public Alley No. 425.	Between Beacon street and Marl- borough street, from Berkeley street to Clarendon street.	1899	.....	.....	.....	.....	.....	.....	.344	.....	.....	.....
Public Alley No. 416.	Between Beacon street and Marl- borough street, from Clarendon street to Berkeley street.	1901	.....	.....	.....	.....	.....	.....	.....	*	.....	.011
Public Alley No. 426.	Between Commonwealth avenue and Marlborough street, from Fairfield street to Exeter street.	1901	.....	.....	.....	.....	.....	.....	.....	* .094	.....	.006
Public Alley No. 417.	Between Beacon street and Marl- borough street, from Fairfield street to Exeter street.	1901	.....	.....	.....	.....	.....	.....	.....	*	.....	.024

Spring street.....	Poplar street to Leverett street.....	1895	.091	.107	.187	.381	.440	.069	.128	.333	.160	.183
Stevens street.....	Lincoln place, toward Shawmut ave...	1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stillman street.....	Endicott st., across North Margin st..	1892	.....	.009	.038	.047	.349	.009	.005	.035	.041	.286
Stoddard street.....	Howard street to Court street.....	1892	.099	.....	.212	.040	.049	.....	.176	.127	.023	.076
Sun-court street.....	North street to Moon street.....	1891	.069	.244	.108	.101	.304	.118	.060	.245	.190	.119
Temple place.....	Washington street to Tremont street..	1900	.....	.....	.....	.....	.....	.....	* .017	.154	.086	.183
Thacher street.....	Washington St. North to Endicott st..	1892	.006	.020	.043	.168	.405	.014	.226	.267	.127	.453
Public Alley No. 428.....	Between Commonwealth avenue and Marlborough street, from Gloucester street to 205 feet east of Hereford street.	1901	.....	.....	.....	.....	.....	.....	.....	*	.....	.017
Tileston street.....	155 feet west of Hanover street, across Unity street.	1887	.173	†	.....	.....	.....	.....	.....	.....	.....	.....
Tileston street.....	Unity street to Salem street.....	1895	.019	.....	.....	.025	.270	.....	.228	.640	.385	.206
Tremont street.....	Scolly square to Boylston street (minus Beacon street intersection).	1900	.....	.....	.....	.....	.....	.....	* .074	.319	.228	.421
Tremont street.....	At Castle square.....	1899	*	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trinity place.....	St. James ave., across Stanhope street..	1900	.....	.....	.....	.....	.....	.....	* .007	.013	† .127	.136
Unity street.....	Charter street to Tileston street.....	1897	.046	.066	.067	.197	.182	.013	.126	.030	.390	.071
Warrenton street.....	Eliot street to Tremont street.....	1884-91	.050	.110	.038	.031	.112	.038	.319	.031	.059	.256
Warrenton street.....	Shawmut avenue to Washington street,	1891	.027	.108	.067	.088	.120	.050	.233	.094	.008	.168
Water street.....	Congress street to Kilby street.....	1889	.....	.....	.....	.....	.....	.....	.....	.....	*	.014
Water street.....	Liberty square to Broad street.....	1896	.050	.013	.018	.029	.025	.038	.059	.213	.070	.060
Wiget street.....	Salem street to North Margin street..	1897	.....	.....	.063	.060	.186	.045	.046	.342	.159	.029
Wiggin street.....	North Bennet street to Tileston street,	1887	.229	† .197	.....	.....	.....	.....	.....	.....	.....	.....

* Guaranty expired in this year.

† Repaved in this year.

† Part repaved in this year.

Cost of Trinidad Asphalt Repairs, 1904-13.—*Concluded.**Charlestown.*

STREET.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Austin street.....	Seminary place to Lawrence street....	1891	\$0.027	\$0.042	\$0.037	\$0.124	\$0.151	\$0.142	\$0.173	\$0.821	\$0.109	\$0.087
Bunker Hill street.....	At Tufts street.....	1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington Street North,	Over Fitchburg Railroad.....	1899	1.127	.341	.336	1.272	.632	.503	1.099	.039	.154	.164
Corey street.....	124 feet north of Moulton street to Moulton street.	1897	.....	.042	.....	.236	.238	.....	.132	.247	.....	.194
Moulton street.....	Easterly side of Corey st. to Vine st....	1897	.....	.....	.....	.....	.025	.....	.....	.030	.....	.043
Moulton street.....	Vine street to Bunker Hill street.....	1897	.....	.012	.039	.....	.007	.008	.032	.095	.....	.044
Tufts street.....	Bunker Hill street, 141 feet northerly,	1897	.....	.....	.....	.038	.070	.044	.....	.154	.....	.035
Vine street.....	Bunker Hill street, across Moulton st.,	1897	.....	.....	.....	.....	.031	.007	.027	.039	.....	.049

South Boston.

D street.....	West Fifth street to Gold street.....	1889	\$0.032	\$0.051	\$0.165	\$0.137	\$0.302	\$0.126	\$0.388	\$0.284	\$0.204	\$0.211
E street.....	West Third street to Bolton street....	1892	.053	.035	.026	.....	.213	.025	.225	.056	.075	.018
I street.....	East Broadway to East Fourth street,	1910	.....	.....	.....	.....	.....	.....	*	.....	.....	.001
Rogers street.....	Dorchester street to Preble street.....	1891	.....	.....	.....	.....	.074	.....	.111	.....	.....	.....
West Sixth street.....	160 feet east of C st., toward D street,	1887	.032	*.073	.....	.....	.....	.....	.....	.....	.....	.....
West Third street.....	153 feet west of E street, across E st..	1892	.054	.....	.032	.027	.117	.007	.134	.002	.016	.....

Roxbury.

Cabot street.....	1891	\$0.002	\$0.019	\$0.025	\$0.069	\$0.078	\$0.014	\$0.144	\$0.178	\$0.173	\$0.048
Tremont street to Ruggles street.	1892	.006	.020	.034	.....	.100	.108	.089	.038	.107	.030
Easterly side of Ruggles street to Vernon street.	1897	.001	.....	.008	.013	.161	.024	.011	.058	.006	.030
Easterly side of Vernon street to Linden Park street.	1896	.123	.060	*	.....	.....	.....	.....	.....	.....	.....
301 feet south of Camden street, across Terry street.											
Columbus avenue.....											

* Repaved in this year.

Cost of Sicilian Rock Asphalt Repairs, 1904-13.

City Proper.

STREET.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Acton street.....	Washington street to Bradford street..	1896	\$0.008	\$0.010	\$0.051	\$0.018	\$0.129	\$0.095	\$0.052	\$0.021	\$0.241	\$0.037
Albany street.....	Easterly side of Stoughton street, across East Concord street.	1897	.205	†.048	.....	.....	.....	.....	.....	.....	.....	.....
Arch street.....	Summer street to Franklin street.....	1901	.....	.....	.....	.....	.....	.....	.....	*.011	.028	.005
Ash street.....	Oak street, across Nassau street.....	1895	.183	.029	.....	.070	.....	†	.....	.....	.....	.....
Avery street.....	Washington street to Mason street....	1897	.....	†	.099	.....	.096	.100	.....	.261	.144	.....
Barton street.....	Leverett street to Milton street.....	1895	.052	.019	.035	.035	.101	.005	.025	.134	.054	.084
Beacon street.....	Arlington street to Dartmouth street..	1901	.....	.....	.....	.....	.....	.....	.....	*.161	.039	.072
Boylston street.....	Arlington street to Berkeley street....	1900	.....	.....	.....	.....	.....	.....	*	.329	.154	.020
Bradford street.....	Walham street to Shawmut avenue....	1897	.021	.001	.011	.018	.010	.021	.021	.005	.034	.011
Cobb street.....	Washington street to Shawmut ave....	1897	.....	.042	.019	.006	.008	.....	.047	.....	.032	.....
Decatur street.....	Washington street to Harrison ave....	1892	.052	.126	.119	.187	.460	.094	.379	.404	.283	.187
Dwight street.....	Shawmut avenue to Tremont street....	1893	.013	.022	.005	.041	.005	.025	.028	.012	.050	.028
East Concord street.....	At Albany street (crossing).....	1897	.....	.....	.....	.....	.....	.....	.....	.....	.170	.....
Essex place.....	Essex street to Tufts street.....	1901	.....	.....	.....	.....	.....	.....	.....	*.135	.037	.038
Exeter place.....	Chauncy street to Harrison avenue....	1897	.....	.046	.032	.105	.008	.....	.074	.043	.045	.025
Fabin street.....	Newland street to Ivanhoe street.....	1895	.....	.067	.....	.....	.008	.....	.....	.....	.....	.058
Fay street.....	Dover street to Harrison avenue.....	1894	.048	.....	.014	.020	.084	.015	.033	.058	.375	.016

Hamburg street.....	1896	.022	.006	.023	.020	.010	.010	.....	.011	.....	.089
Hanover street.....	1896	.065	.144	.146	.122	.234	.137	.344	.771	.310	.486
Harrison avenue.....	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*.043
Huntington avenue.....	1896	.012	.017	.015	.035	.039	.128	.042	.046	.037	.059
India street.....	1901	.....	.....	.....	.....	.....	.....	.....	*	.536	.215
Kingston street.....	1899	.....	.....	.....	.....	.....	*.080	†.355	.....	.....	.....
Marlborough street.....	1901	.....	.....	.....	.....	.....	.....	.....	*.025	.006	.027
Mason street.....	1894	.198	.256	.325	†	.....	.....	.....	.....	.....	.....
Mason street.....	1901	.....	.....	.....	.....	.....	.....	.....	*.505	.104	.055
Massachusetts avenue...	1894	.011	.013	.035	.002	.029	.014	.080	.062	.058	.071
Massachusetts avenue...	1894	.011	.034	.003	.010	.055	.045	.165	.164	.056	.154
Massachusetts avenue...	1901	.....	.....	.....	.....	.....	.....	.....	*.154	.164	.214
Massachusetts avenue...	1901	.....	.....	.....	.....	.....	.....	.....	*.341	.617	.395
Mayo street.....	1897	.....	.065	.011	.....	.047	.027	.....	.....	.047	.....
Meander street.....	1896	.....	.002	.....	.....	.015	.089	.116	.....	.010	.049
Morton street.....	1901	.....	.....	.....	.....	.....	.....	.....	*	.....	.137
Motte street.....	1892-99	.025	.....	.....	.....	.147	.032	.017	.150	.....	.059
Mystic street.....	1895	.012	.036	.016	.015	.027	.010	.131	.017	.006	.037
North Margin street.....	1897	.027	.095	.015	.077	.105	.003	.011	.....	.085	.021

* Guaranty expired in this year.

† Repaved in this year.

‡ Part repaved in this year.

Cost of Sicilian Rock Asphalt Repairs, 1904-13.—Continued.

City Proper.—Concluded.

STREET.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Norwich street.....	Mystic street to Meander street.....	1896	.....	\$0.029	\$0.015	.....	\$0.014	\$0.016	\$0.042	.....	.....	\$0.043
Ohio street.....	Washington st. to Shawmut ave.....	1896	\$0.077	.040	.021	\$0.030	.088	.093	.096	\$0.009	\$0.254	.....
Otter street.....	Beacon st. to alley along Charles river,	1901	.....	.....	.....	.....	.....	.....	.....	*	.163	.003
Pemberton square.....	Front of Suffolk Courthouse.....	1894	.030	.008	.012	.002	.013	.....	.017	.029	.....	.....
Prince street.....	Hanover street to Bennet avenue.....	1895	.190	.007	.035	.038	.073	.021	.093	.812	.225	.409
Salem street.....	Endicott street, across Prince street...	1901	.....	.....	.....	.....	.....	.....	.....	*	.181	.045
Shawmut avenue.....	132 feet south of Castle street, across Cherry street.	1898	.057	.069	.081	.150	.198	.194	.325	.325	.504	.114
Stoughton street.....	At Albany street (crossing).....	1897	.....	.....	.....	.....	.....	.....	.....	.....	.059	.....
Taylor street.....	Dwight street to Milford street.....	1896	.....	.048	.020	.....	.020	.....	.084	.012	.046	.024
Tufts street.....	Kingston street to South street.....	1901	.....	.....	.....	.....	.....	.....	.....	*.064	.033	.029
Tyler street.....	Oak street to Harvard street.....	1901	.....	.....	.....	.....	.....	.....	.....	*.113	.180	.099
Whitmore street.....	Kneeland street to Harvard street....	1895	.....	.063	.030	.....	.026	.018	.137	.....	.055	.035

South Boston.

Athens street.....	West Second street to A street.....	1895	.....	\$0.019	.....	\$0.009	.....	\$0.073	.....	.....	\$0.102	.....
Athens street.....	B street to C street.....	1892	.....	.028	\$0.013	.010	.....	.064	.....	.....	.059	.....
Athens street.....	C street to D street.....	1901	.....	.....	.....	.....	.....	.....	.....	*	.172	.....

Bowen street.....	C street to E street.....	1901	.0000									*	.125	\$0.002
East Broadway.....	Front of Lincoln School.....	1897	\$0.056	.110	.062	.048	\$0.052					\$0.071	*	.032
Gold street.....	B street to D street.....	1901											\$0.004	.111
K street.....	East Sixth street to East Eighth street,	1896	.054	.048	.060	.106	.056	.094	.215	.050				.443
Silver street.....	B street to D street.....	1901								*			* .193	
Tudor street.....	C street to D street.....	1901								*			* .193	
West Broadway	From 196 feet east of easterly line of Dorchester avenue to A street.	1892	.066	.183	.153	.200	.274	.271	.352	.366	.105			.271
West Broadway	Gardner place to 150 feet easterly	1893	.122	.152	.195	.246	.440	.298	.489	.306	.312			.221
West Broadway	150 feet west of F street to 267 feet east of F street.	1897	.030	.112	.022	.023	.133	.049	.143	.117	.099			.059
West Broadway	267 feet east of F street to 28 feet west of Dorchester street.	1898	.031	.062	.019	.029	.037	.035	.084	.081	.022			.082

Roxbury.

[illegible]

**** Guaranty expired in this year.**

† Repaved in this year.

Cost of Sicilian Rock Asphalt Repairs, 1904=13.—*Concluded.**East Boston.*

STREET.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Meridian street.....	Trenton street to Eutaw street.....	1900	.....	.....	.....	.....	.....	.....	*	\$0.243	.....	\$0.169

Charlestown.

Lawrence street.....	East side of Lawrence avenue, across Miller street.	1901	.....	.....	.....	.....	.....	.....	.....	*	.....	\$0.036
Miller street.....	Main street to Lawrence street.....	1901	.....	.....	.....	.....	.....	.....	.....	*	.....	.231
Warren street.....	Winthrop street, across Soley street...	1901	.....	.....	.....	.....	.....	.....	.....	*	\$0.293	.543

* Guaranty expired in this year.

Cost of Seyssel Rock Asphalt Repairs, 1904-13.

STREET.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Genesee street.....	Harrison avenue to Albany street....	1899	*	\$0.039	\$0.007	\$0.016	\$0.010	\$0.084	\$0.069	\$0.040	\$0.127	\$0.042
Mason street.....	444 feet south of West street to Avery street.	1899	*	.....	.045	.097	.086	†.025	.....	.....	.....	.....
Mason street.....	22 feet north of Avery street to Avery street.	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.127
Milton street.....	Brighton street to Spring street.....	1899	.....	.....	.....	.....	.....	.....	.026	.052	.....	.058
Oswego street.....	Harrison avenue to Albany street....	1899	*	.006	.008	.009	.022	.032	.041	.038	.075	.010
Paul street.....	Emerald street to Village street.....	1897-99	.....	.....	.....	.023	.077	.....	.056	.299	.042	.017
Paul street.....	Village street to Tremont street.....	1897-99	.....	.015	.....	.028	.094	.040	.138	.175	.065	.069
Pelham street.....	Washington street to Shawmut ave....	1897	\$0.091	.....	.016	.013	.042	.078	.027	.028	.193	.105
Waterford street.....	Washington street to Shawmut ave....	1897	.149	.021	.089	.085	.093	.047	.131	.184	.168	.....

* Guaranty expired in this year.

† Part repaved in this year.

Summary of Table Showing the Cost of Asphalt Repairs from 1904 to 1913.

YEAR.	Contract Awarded to	CONTRACT PRICES.			AREAS AND COST.			
		Asphalt Surface and Binder per Square Yard.	Concrete Base per Square Yard.	Extra Binder per Cubic Yard.	Total Area Not Under Guaranty Maintained by the City. Square Yards.	Cost of Maintenance for Current Year.	Unit Area Repaired.	Unit Cost per Square Yard.
1904.	Barber Asphalt Paving Company*.....	\$2 50	\$0 75	\$9 00	200,000	\$11,166 24	.0222	\$0 056
1905.	Barber Asphalt Paving Company*.....	2 50	75	9 00	196,932	13,488 16	.0274	069
1906.	Barber Asphalt Paving Company*.....	2 50	75	9 00	148,359	8,101 15	.0217	055
1907.	Barber Asphalt Paving Company*.....	2 50	75	9 00	140,821	10,808 44	.0305	077
1908.	Warren Brothers Company†.....	1 73	75	7 50	135,676	15,793 80	.0667	116
1909.	Jones & Meehan†.....	1 62	75	8 00	131,688	9,945 24	.0463	076
1910.	Barber Asphalt Paving Company†.....	1 49	1 00	8 00	139,829	15,632 74	.0742	112
1911.	Warren Brothers Company†.....	1 34	1 00	9 00	218,007	27,504 52	.0930	125
1912.	Warren Brothers Company†.....	1 24	1 10	11 00	223,848	26,397 97	.0933	118
1913.	Warren Brothers Company†.....	1 37	1 15	11 00	226,837	22,839 01	.0729	.....

* Not advertised.

† Advertised and awarded to lowest bidder.

Cost of Bitulithic Repairs, 1904 to 1913, Inclusive.

STREETS.	Limits.	Year Laid.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
Belvidere street.	West Newton street to Massachusetts avenue.	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*\$0.078
Berkeley street.	Boylston street to Beacon street.	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*.005
Bowdoin street.	Ashburton place to Cambridge street. .	1902	.....	.....	.....	.....	.....	.....	.....	.....	*	.164
Hancock street.	Mt. Vernon street to Cambridge street,	1902	.....	.....	.....	.....	.....	.....	.....	.....	*	.009
Maverick street.	London street to Havre street.	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*.013
Massachusetts avenue.	Columbus avenue to Huntington ave- nue.	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*.094
Massachusetts avenue.	Beacon street to Harvard Bridge.	1902	.....	.....	.....	.....	.....	.....	.....	.....	*	.300
Tremont street.	St. Alphonsus street to Phillips street. .	1902	.....	.....	.....	.....	.....	.....	.....	.....	*	.042
West Newton street.	Columbus avenue to Huntington ave- nue.	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*.014
West Newton street.	Huntington avenue, across Belvidere street.	1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	*.014

* Guaranty expired in this year.

Summary of Table Showing Cost of Bitulithic Repairs, 1913.

YEAR.	Contract Awarded to.	CONTRACT PRICES.				AREAS AND COST.			
		Bitulithic Full Depth Patches per Square Yard.	Bitulithic Surface Patches per Square Yard.	Concrete Base per Square Yard.	Extra Binder per Cubic Yard.	Total Area Not Under Guaranty Maintained by the City. Square Yards.	Cost of Maintenance for Current Year.	Unit Area Repaired.	Unit Cost per Square Yard.
1913.....	Warren Brothers Company*..	\$1 37	†\$0 80	\$1 15	\$11 00	40,888	\$1,625 60	.0309	\$0.040

* Advertised and awarded to lowest bidder.

† By agreement.

SANITARY SERVICE.

FINANCIAL STATEMENT.

Expenditures from February 1, 1913, to January 31, 1914		\$968,252 20
Amount transferred by Service transfer, for work done and materials furnished:		
Lighting Service	\$427 80	
Paving Service	13,898 72	
Street Cleaning and Oiling Service	33,684 43	
		\$48,010 95
Less Service transfers, work done and materials furnished by other Services:		
Paving Service	\$1,145 32	
Street Cleaning and Oiling Service	3,931 99	
		5,077 31
		<u>42,933 64</u>
Cost of maintenance of Sanitary Service		\$925,318 56
Of this amount there was received and credited to the appropriation:		
For the sale of tickets for the removal of ashes and waste	\$60,530 05	
Sale of "Cormorant"	8,287 42	
Sale of old material	358 37	
Sale of old hose	50 00	
Refund Adams Express	47	
Work done and materials furnished different divisions and departments	5,973 12	
		<u>75,199 43</u>
Net cost of maintenance of Sanitary Service,		<u><u>\$850,119 13</u></u>

SPECIAL APPROPRIATIONS.

LAND AND BUILDINGS, REFUSE STATIONS.

Albany Street Transfer Station.

Labor, engineering	\$253 10
Labor, building run	613 31
Teaming	66 00
Blacksmith work, guard rails	113 75
Scales (new)	177 50
Covering I-beams, etc.	527 21

Amount paid to Lawler Brothers, under contract:

Contract price \$31,033 00

Extra work:

Removing capstan 7 30

Build concrete pier 255 42

Drill I-beams 100 00

Material and planking around
dump strip 161 23

Allowance on account of delay, ... 1,733 40

\$33,290 35

Credit:

Less second-hand

oak piles in

place of new

piles \$60 00

78 M. feet lum-

ber at \$34.50 2,691 00

14 chutes at \$20, ... 280 00

3,031 00

\$30,259 35

Less amount paid in 1912 6,003 72

24,255 63

\$26,006 50*Fort Hill Wharf, Atlantic Avenue Transfer Station.*

Labor, inspection	\$84 00
Electric lighting	50 59
Blacksmith work, guard rails	189 06

Carried forward \$323 65

<i>Brought forward</i>		\$323 65
Scales (new)		382 80
Covering I-beams, etc.		580 87
Roofing, fire hose, etc.		466 10
Sundries		15 79
Amount paid to Rendle & Stoddard under contract:		
Contract price	\$64,864 00	
Extra work:		
Concrete piers changed to piles;	25 00	
Sheathing driven in bulkhead,	38 78	
Extra bend at exit incline	56 56	
Stone wall on north side line	38 88	
False cap under main girder caps	26 00	
Curve extended on exit incline,	31 77	
Cutting away to make room for I-beam	10 50	
Shims on both runways	23 48	
3 extra doors built	17 05	
Holes drilled in roof beams	40 60	
Holes drilled in steel beams	31 50	
Plank laid on exit runway	13 25	
Fence posts moved back and gate built on exit incline	20 80	
End of iron beams planked, entrance incline	98 50	
Wheel guards around gate posts	14 55	
Fender blocks at corner of drives	10 50	
Bevel hatch combings	6 00	
2 by 4 spiking pieces placed to fasten rafters and bridge	143 50	
	\$65,511 22	
Less amount paid in 1912	61,620 80	
		3,890 42
		<u>\$5,659 63</u>

South Station Transfer Station.

Labor, inspection	\$147 00
Labor	90 82
Teaming	28 70
Electric lights	211 82
Blacksmith work, guard rails	330 42
Scales	382 80
<i>Carried forward</i>	\$1,191 56

<i>Brought forward</i>		\$1,191 56
Covering I-beams, fire hose, etc.		587 02
Sundries		10 49
Amount paid to Lawler Brothers under contract:		
Contract price	\$71,330 00	
Extra work:		
Removing two trees	25 00	
Extra girder braces	159 71	
500 feet B. M. hard pine	20 00	
Roof beams drilled and rider plates placed	173 27	
3 extra doors furnished and placed	25 19	
Molding changed	31 85	
Help furnished for emergency drop	62 13	
		\$71,830 15
Credit.		
Less deduction for change in size of lumber	167 32	
		\$71,662 83
Less amount paid in 1912	60,026 72	
		11,636 11
		<u>\$13,425 18</u>

Ward Street Transfer Station.

Labor, clearing ground	\$122 68	
Labor, engineering	163 54	
Commission paid to real estate dealer	150 00	
		\$436 22

Total Cost of House Dirt, Waste and Rubbish and House Offal.

Salaries of division engineer, supervisor, medical inspector and general foreman	\$9,237 91	
Office supplies and expenses, printing, stationery, etc.	5,424 63	
Ashes, waste and rubbish account	604,074 09	
House offal account	251,183 85	
Annuities	\$600 00	
Retired veterans' pensions	3,775 28	
<i>Carried forward</i> , ...	\$4,375 28	\$869,920 48

<i>Brought forward</i>	\$4,375 28	\$869,920 48
Retired laborers' pensions	9,391 20	
		13,766 48
		\$883,686 96

Construction, Repair and Horseshoeing Account.

Expended for labor	\$58,210 54	
Expended for stock	26,354 70	
		84,565 24
		\$968,252 20

(Service Transfers.)

Street Cleaning and Oiling Service, ...	\$29,752 44	
Paving Service	12,753 40	
Lighting Service	427 80	
		42,933 64
		\$925,318 56

Total Revenue Received for Board and Care of Horses, Rent, Use of Dumping Boats, Shoeing, Repairing Vehicles, etc.

Bridge Service, Bridge and Ferry Division	\$683 79	
Paving Service, Highway Division	13,898 72	
Lighting Service, Highway Division	427 80	
Street Cleaning and Oiling Service, Highway Division	33,684 43	
Sewer Service, Sewer and Water Division	1,729 54	
Water Service, Sewer and Water Division	3,289 54	
Health Department	270 25	
		\$53,984 07
Gross revenue		

Paid in transfers	\$48,010 95	
Paid in to collector	5,973 12	
		\$53,984 07

Money deposited, bills presented and collections made by the City Collector during the year ending January 31, 1914:

Bills Presented and Money Deposited.

To letting of scow privileges	\$859 85	
Sale of offal, Hyde Park	1,156 32	
Sale of junk	289 59	
Sale of manure	878 58	
<i>Carried forward</i>	\$3,184 34	

<i>Brought forward</i>	\$3,184 34	
Use of Barney dumpers	3,700 00	
Tearing down runway, Fort Hill Wharf	356 00	
		<u>\$7,240 34</u>

Amount Collected.

Sale of manure	\$878 58	
To letting of scow privileges	859 85	
Use of Barney dumpers	3,580 00	
Use of paper cart	¹ 25 00	
Use of paper cart	² 2 50	
Tearing down runway, Fort Hill Wharf	356 00	
Collection of offal, Hyde Park	³ 289 08	
Collection of offal, Hyde Park	978 57	
Sale of junk	289 59	
		<u>\$7,259 17</u>

¹ Deposited 1912-13.² Deposited 1911-12.³ Deposited 1912-13.**Items of Expenditure for the Year 1913-14.**

ITEMS.	Total Amount Expended.
Salary, Division Engineer (in part)	\$1,250 00
Salary, supervisor	*2,991 56
Salary, general foreman	1,795 04
Salaries, yard clerks	1,643 23
Salaries, foreman	10,324 84
Salaries, engineers	20 00
Labor — collecting and disposing of house dirt and ashes	250,049 72
Labor — collecting and disposing of waste and rubbish	31,997 40
Labor — collecting and disposing of house offal	151,339 54
Labor and stock in stables and yards	59,402 00
Hired teams on ashes	103,966 53
Hired teams on offal	1,609 42
Contracts on ashes — East Boston, Brighton, West Roxbury and Dorchester	83,856 11
Contracts on offal — East Boston, Brighton, West Roxbury and Dorchester	43,712 17
Ash and offal stock	541 23
Holidays, pay allowed	39,760 25
Grain	20,746 29
Hay and straw	20,054 87
Medical attendance on injured employees	499 98
Pay allowed injured employees	2,787 86
Horses, new	3,558 70
<i>Carried forward</i>	<u>\$831,906 74</u>

* One-half of Supervisor's salary paid by Street Cleaning and Oiling Service.

Items of Expenditure.—*Concluded.*

ITEMS.	Total Amount Expended.
<i>Brought forward</i>	\$831,906 74
Veterinary services and medicine.....	1,226 63
Horse hire.....	86 00
Outside board and care of horses.....	1,396 00
Outside horseshoeing, wheelwrighting, blacksmithing, etc....	5,849 71
Labor and stock—paint, wheelwright, blacksmith and harness shops.....	75,293 54
Dumping boats — stock and supplies.....	101 70
Repairs to stables and sheds.....	2,638 47
Repairs to wharves and boats.....	3,153 59
Fuel.....	1,337 01
Gas.....	553 19
Electric light and power.....	3,772 96
Printing, stationery, office items and incidentals.....	4,192 21
Automobile expense:	

Construction and Repair Shops, 1913-14.

For work done and materials furnished for other services and departments and for the Sanitary Service the different shops received and expended the following amounts:

SHOPS.	STOCK AND LABOR.		Total.
	Other Services and Departments.	Sanitary.	
Wheelwright.....	\$7,971 04	\$11,611 82	\$19,582 86
Blacksmith — South End..	9,137 19	9,208 46	18,345 65
Blacksmith — West End...	.....	8 60	8 60
Paint.....	7,603 30	5,586 78	13,190 08
Harness.....	4,550 04	8,003 88	12,553 92
Horseshoeing — South End,	3,816 25	1,511 95	5,328 20
Horseshoeing — West End..	1,280 25	1,832 32	3,112 57
Horseshoeing — Roxbury...	584 25	1,807 27	2,391 52
Totals, stock and labor...	\$34,942 32	\$39,571 08	\$74,513 40

Foreman	\$1,524 28	
Clerk	780 14	
Express teamster	734 39	
Allowed time and holidays	5,630 37	
Pay allowed injured employees and medical attendance	88 38	
Expended for electric power	514 14	
		9,271 70
Total cost, maintenance of shops		\$83,785 10
Income from outside services and departments		34,942 32
Net cost of maintenance of shops to Sanitary Service		<u>\$48,842 78</u>

*Detailed Account of Amounts Paid to the Sanitary Service During
Year Ending January 31, 1914.*

For official salaries	\$2,081 04
For repair and construction work	29,261 57
For horseshoeing	5,680 75
For use of dumping boats	7,831 50
For hay, straw, grain and board and care of horses	3,485 87
Carried forward	<u>\$48,340 73</u>

<i>Brought forward</i>	\$48,340 73
For feeders, stablemen and watchmen	1,810 07
For fuel, light, etc.	775 32
For board and care of sick horses in veterinary hospital	912 00
For rent of wharf, Atlantic avenue	3,000 00
For labor and supervision, cleaning and watering streets	439 25
For contract teams on snow	41 25
For labor and supervision, removing snow	267 69
For furnishings of prison vans	27 01
For telephones	6 75
Total income	<u>*\$55,620 07</u>

* Includes bill paid by County of Suffolk, \$1,636, and 1912 bills paid by Water Service, \$155.68.

Amounts Paid to Other Services for the Year Ending January 31, 1914, by the Sanitary Service.

To Street Cleaning and Oiling Service, removal of ashes	\$3,931 99
To Paving Service, labor, ashes	80 38
To Paving Service, board and care of horses	863 97
To Paving Service, lumber, gravel, sand, etc.	200 97
	<u>\$5,077 31</u>

Horseshoeing, by Divisions.

KINDS AND STYLES.	HIGHWAY DIVISION.				Sewer and Water Division, Sewer Service.	Health Department.	County of Suffolk.	Totals.
	Sanitary Service.	Street Cleaning and Oiling Service.	Paving Service.	Lighting Service.				
Plain shoes.....	7,980	4,842	854	36	639	82	94	14,527
Bar shoes.....	464	190	52	....	130	2	25	863
Leathers.....	4,469	2,675	376	14	469	44	30	8,077
Resets.....	684	638	93	14	69	1	66	1,565
Pads.....	352	555	86	22	105	34	84	1,238

Average cost per shoe, 46 cents.

Cost of Horseshoeing.

	Division Shops.	Outside Shops.
Stock.....	\$3,418 96	\$2,351 70
Labor.....	7,413 32	
Totals.....	\$10,832 28	\$2,351 70

Amount Expended for the Collection and Disposal of House Dirt, Ashes, Garbage and Waste and Rubbish,
by Districts, Including Labor, Stock, etc.

Districts.	Popula- tion.	ASHES.		GARBAGE.		WASTE AND RUBBISH.		Total Cost. Total Cost per Capita.
		Cost.	Cost per Capita.	Cost.	Cost per Capita.	Cost.	Cost per Capita.	
1. South Boston.....	73,672	\$32,672 53	\$0 4435	\$16,568 18	\$0 2254	\$981 48	\$0 0119	\$50,222 19
2. East Boston.....	63,376	12,262 97	0 1966	8,559 64	0 1350	.....	.....	20,822 61
3. Charlestown.....	41,747	30,690 62	0 7351	13,192 62	0 3160	513 02	0 0122	44,396 26
4. Brighton.....	29,377	13,640 95	0 4643	10,922 10	0 3718	.....	.....	24,563 05
5. West Roxbury.....	47,544	23,794 96	0 5004	15,374 92	0 3233	95 61	0 0020	39,265 49
6. Dorchester.....	127,831	55,434 30	0 4336	30,001 93	0 2347	.....	.....	85,436 23
7. Roxbury.....	122,975	85,741 04	0 6964	37,187 42	0 3024	1,099 41	0 0089	124,027 87
8 and 9. South End and Back Bay...	118,488	137,027 87	1 1568	45,844 30	0 3870	27,564 87	0 2327	210,437 04
10. North and West Ends.....	87,686	72,086 12	0 8221	12,472 99	0 1422	8,217 93	0 0937	92,777 04
11. Hyde Park.....	16,376	5,873 10	0 3586	3,034 84	0 1853	.....	.....	8,907 94
Dumping boats.....	.....	84,836 77	.....	58,024 91	.....	11,540 54	.....	154,402 22
Totals.....	729,072	\$554,061 23	.....	\$251,183 85	.....	\$50,012 86	.....	\$855,257 94

Force Employed on House Dirt and Ashes January 31, 1914.

CITY FORCE.	Number.	Hired Teams.	CONTRACTORS' TEAMS.					Total.
			East Boston.	Brighton.	West Roxbury.	Dorchester.	Hyde Park.	
Inspectors.....	26	..	..	..	..	..	..	26
Teamsters.....	104	78	4	8	4	24	1	223
Helpers.....	110	78	10	16	7	48	2	271
Dumpers.....	21	..	..	..	..	..	..	21
Totals.....	251	156	14	24	11	72	3	541

Amount of House Dirt and Ashes Removed.

YEARS.	Loads.	Cubic Yards.	Tons.
1909.....	299,071	692,865	311,791
1910.....	284,343	746,585	335,997
1911.....	274,737	707,916	333,782
1912.....	282,190	781,140	368,327
1913.....	269,982	715,928	337,560

Force Employed on House Offal January 31, 1914.

CITY FORCE.	Number.	CONTRACTORS' TEAMS.					Total.
		East Boston.	West Roxbury.	Brighton.	Dorchester.	Hyde Park.	
Inspectors.....	16	..	..	..	..	..	16
Teamsters.....	48	3	4	6	10	1	72
Helpers.....	47	5	4	6	10	1	73
Dumpers.....	5	..	..	..	..	..	5
Totals.....	116	8	8	12	20	2	166

Amount of House Offal Removed.

YEARS.	Loads.	Cubic Yards.	Tons.
1909.....	54,747	105,595	68,636
1910.....	48,510	97,651	63,451
1911.....	47,372	103,890	70,126
1912.....	49,102	108,832	73,462
1913.....	54,873	124,302	83,903

Force Employed on Waste and Rubbish January 31, 1914.

CITY FORCE.	Number.
Inspectors.....	2
Teamsters.....	12
Helpers.....	21
Total.....	35

Amount of Waste and Rubbish Removed.

YEARS.	LOADS.		Cubic Yards.	Tons.
	Paper Carts.	Market Wagons.		
1909.....	5,556	7,397	99,975	10,916
1910.....	5,655	8,370	112,801	12,328
1911.....	1,943	4,847	63,719	8,250
1912.....	1,308	5,490	66,598	8,632
1913.....	1,174	7,812	75,257	9,747

Number of Loads of Material Collected from February 1, 1907, to January 29, 1914.

YEARS.	Ashes.	Offal.	Rubbish.	Total Loads.	Tons.
1907.....	377,058	64,712	17,169	458,939	379,067
1908.....	339,913	62,892	16,238	419,045	403,767
1909.....	299,071	54,747	12,953	366,771	391,343
1910.....	284,343	48,610	14,025	346,978	411,776
1911.....	274,737	47,372	6,790	328,899	412,158
1912.....	282,190	49,107	6,798	338,095	450,421
1913.....	269,982	54,873	8,986	333,841	431,220

Capacity of Carts and Wagons in Use by the Sanitary Service.

	Pounds.	Cubic Feet.
Single ash carts.....	1,886	54
Double ash carts (City).....	3,300	94.5
Double ash carts (contractors).....	5,064	145
Paper carts.....	1,400	146
Paper wagons (City).....	2,200	229
Paper wagons (contractors).....	3,000	312
Single offal wagons.....	2,363	47
Double offal wagons.....	5,726	94

Loads Collected by Contractors.

DISTRICTS.	ASH LOADS.			Paper Wagons.	Cubic Yards.	TONS.		Total Tons Ashes and Paper.
	Single.	Double.	Cubic Yards.			Ashes.	Paper.	
East Boston.....		10,212	52,898			24,941		24,941
Brighton.....	2,880	9,254	38,149			17,988		17,988
West Roxbury.....	81	7,348	25,880			12,202		12,202
Dorchester.....		22,933	123,150	831	9,557	58,065	1,247	59,312
Hyde Park.....	3,853	839	10,643			5,018		5,018
Totals.....	6,814	50,586	250,720	831	9,557	118,214	1,247	119,451

	OFFAL LOADS.				SUMMARY.		
	Single.	Double.	Cubic Yards.	Tons.	Material.	Cubic Yards.	Tons.
East Boston.....		1,550	5,425	3,662	Ashes.....	250,720	118,214
Brighton.....		1,705	5,968	2,014	Offal.....	55,292	37,315
West Roxbury.....	14	1,148	4,043	2,729	Paper.....	9,557	831
Dorchester.....		10,990	38,465	25,964			
Hyde Park.....	789		1,381	932			
Totals.....	803	15,393	55,282	37,315	Totals.....	315,569	156,360

Loads and Tonnage of Material Collected, by Districts.

CLASS OF REFUSE.	1. South Boston.	2. East Boston.	3. Charlestown.	4. Brighton.	5. West Roxbury.	6. Dorchester.	7. Roxbury.	8-9. South End and Back Bay.	10. North and West Ends.	11. Hyde Park.	Total Tons. (2,000 pounds.)	Total Loads.	Cubic Yards.
House dirt and ashes:													
Loads.....	22,613	10,212	13,898	12,134	16,345	22,933	36,840	74,475	55,840	4,692	.....	269,983	715,958
Tons.....	21,324	24,941	13,243	17,988	26,722	58,065	40,474	76,330	53,405	5,018	337,560		
Offal:													
Loads.....	3,844	1,550	2,107	1,705	4,472	10,990	8,014	15,984	5,418	789	83,903	54,873	121,318
Tons.....	4,541	3,662	2,489	4,028	6,638	25,964	9,919	19,330	6,400	932			
Waste and rubbish:													
Loads.....	413	.....	93	.....	36	831	351	5,921	1,341	.....	.....	8,986	75,257
Tons.....	316	.....	102	.....	40	1,247	386	6,237	1,419	.....	9,747		
Totals {	24,870	11,762	16,098	13,839	20,853	34,754	45,205	96,380	62,599	5,481	.....	333,841	
{ Loads.....											.....		
{ Tons.....	26,181	28,603	15,834	22,016	33,450	85,276	50,779	101,897	61,224	5,950	431,210	.....	912,503

Final Disposition of all Materials, in Loads and Tons (2,000 Pounds), Collected by the Sanitary Service from January 24, 1913, to January 29, 1914, Inclusive.

CLASS OF REFUSE.	Boston Development and Sanitary Company.	Collected and Dis- posed of by Contractors.	Towed to Sea.	Total Number of Loads Disposed of.	Total Tons.
House dirt and ashes.....{	235,515	34,467	.....	269,982	337,560
	277,411	60,149	.....	.....	
Offal.....{	49,677	5,206	.....	54,873	83,903
	72,552	11,351	.....	.....	
Waste and rubbish.....{	8,986	.....	.....	8,986	9,747
	9,747	.....	.....	.....	
Cesspool dirt.....{	.....	.....	38	38	49
	.....	.....	49	.....	
Street sweepings.....{	.....	.....	31,288	31,288	39,930
	.....	.....	39,930	.....	
Totals { Loads.....	294,163	39,673	31,326	365,167	471,189
{ Tons.....	359,710	71,500	39,979	.....	

NOTE.— First item, loads. Second item, tons.

Cost of Collection and Disposal of Refuse by Contract in the City of Boston for the Year 1913-14.

Contract Districts and Population.	Character of Refuse.	Tons. (2,000 lbs.)	Total Tons.	Cost per Ton by Districts; Collection and Disposal.	Cost by Districts.			Where Disposed of.
					Cost.	Total Cost.	Total Cost per Capita.	
2.. (63,376) ..	{ Mixed refuse, principally ashes (no kitchen wastes).....	24,941	.....	\$0 4916	\$12,262 97	.....	.....	Inland dumps.
	{ Garbage, principally kitchen wastes.....	3,662	28,603	2 3374	8,559 64	\$20,822 61	\$0 3287	Inland dumps.*
4.. (29,377) ..	{ Mixed refuse, principally ashes (no kitchen wastes).....	17,988	.....	\$0 7583	\$13,640 95	.....	.....	Inland dumps.
	{ Garbage, principally kitchen wastes.....	4,028	22,016	2 7115	10,922 10	24,563 05	0 8361	Inland dumps.*
5.. (part) .. (26,457)	{ Mixed refuse, principally ashes (no kitchen wastes).....	12,202	.....	\$0 6864	\$8,375 84	.....	.....	Inland dumps.
	{ Garbage, principally kitchen wastes.....	2,729	14,931	1 9731	5,384 71	13,760 55	0 5201	Inland dumps.*
6.. (127,831) ..	{ Mixed refuse, principally ashes (no kitchen wastes).....	58,065	.....	\$0 9346	\$55,434 30	.....	.....	Boston Development and Sanitary Company.†
	{ Garbage, principally kitchen wastes.....	25,964	.....	2 0200	52,448 21	.....	.....	
Hyde Park... ‡ (16,376)	{ Store refuse and paper.....	1,247	85,276	.....	.....	107,882 51	0 8431	Boston Development and Sanitary Company.†
	{ Mixed refuse, principally ashes (no kitchen wastes).....	5,018	5,018	\$1 1106	\$5,873 10	5,873 10	0 3586	Inland dumps.
263,417	Totals.....	.....	155,844	Av. \$1 1094	.....	\$172,901 82	\$0 6563	

* Removed beyond city limits and presumably fed to swine.

† Contract for disposal.

‡ Population, 16,376, duplicated on day labor table.

Total, as above..... \$172,901 82

Add total of day labor table (preceding page 363)..... 752,416 74

Net amount of appropriation..... \$925,318 56

Number of Carts, Wagons and Sleds Used by the Sanitary Service for the Collection of House Dirt and Ashes, Waste and Rubbish and Garbage During the Year Ending January 31, 1914.

Districts.	ASH CARTS.			OFFAL WAGONS.				PAPER.		Sleds.	Pungs.	Contractors.	
	WOOD.			IRON.		Double.	Single.	Double.	Carts.				Wagons.
	Auto.	Single.	Double.	Single.	Double.								
1. South Boston.....		22		3		6		2	1	15		Capron Cerrilli & Co. Frank P. Neelon. Joseph McGreevey, Timothy J. Lehan. John J. Moore. Walter Griffin. John J. Bradley. M. H. Loonie. M. McGuinness & Co. William P. Nickerson.	
3. Charlestown.....		14	.....	5	.....	.....	.....	.....	1	9	.....		
7. Roxbury.....	1	41	7	16	2	9	2	3	1	37	8		
8. South End Shop.....		26	1	3	6	.....	.....	1	.....	.....	.....		
10. North and West Ends.....		39	.....	7	.....	.....	.....	6	4	5	.....		
8 and 9. South End.....		66	.....	19	1	.....	.....	5	10	32	.....		
Total number used by Sanitary Service.....	1	208	8	53	9	15	2	17	17	98	8		
IN USE BY CONTRACTORS.													
2. East Boston.....			4	.....	.....	.....	.....	.....	.....	.....	.....		
2. East Boston.....							3	.....	.....	.....	.....		
4. Brighton.....		1	6	.....	.....	.....	.....	.....	1	.....	.....		
4. Brighton.....					2	.....	4	.....	.....	.....	.....		
5. West Roxbury.....			4	.....	.....	.....	.....	.....	.....	.....	.....		
5. West Roxbury.....					1	.....	3	.....	.....	.....	.....		
6. Dorchester.....		24	.....	.....	.....	.....	.....	.....	.....	.....	.....		
6. Dorchester.....				1	10	.....	.....	.....	.....	.....	.....		
11. Hyde Park.....		3	.....	.....	.....	.....	.....	.....	.....	.....	.....		
11. Hyde Park.....							1	1	.....	.....	.....		
Totals.....	1	212	46	54	22	15	13	18	18	98	8		

Cost of Collection and Disposal of Refuse by Day Labor Force in the City of Boston for the Year 1913-14.

Districts and Population.	CHARACTER OF REFUSE.	COST PER TON BY DISTRICTS.					COST BY DISTRICTS.					WHERE DISPOSED OF.
		Tons. (2,000 lbs.)	Total Tons.	To Collect.	For Disposal.	Total Collection and Disposal.	To Collect.	Total Cost to Collect.	For Disposal.	Total Cost of Disposal.	Total Cost of Collection and Disposal.	
1. (73,072)	Mixed refuse, principally ashes (no kitchen wastes)...	21,324		\$1 7315	\$0 0351	\$1 7666	\$36,923 63		\$748 90			To inland dumps.
	Garbage, principally kitchen wastes.....	4,541		3 6485		3 6485	16,568 18					Boston Development and Sanitary Company.
	Store refuse, principally paper.....	316		3 1059		3 1059	981 48					To inland dumps.
			26,181					\$54,473 29		\$748 90	\$55,222 19	\$0 7488
				Av. \$2 0806	Av. \$0 0286	Av. \$2 1092						
2. (41,747)	Mixed refuse, principally ashes (no kitchen wastes)...	13,243		\$2 6366	\$0 0584	\$2 6950	\$34,917 06		\$773 39			To inland dumps.
	Garbage, principally kitchen wastes.....	2,489		6 0793	0 0246	6 1039	15,131 39		61 23			Boston Development and Sanitary Company.
	Store refuse, principally paper.....	102		5 0296	0 0527	5 0296	513 02					
			15,834					50,561 47		\$34 62	\$51,396 09	1 2311
				Av. \$3 1922	Av. \$0 0551	Av. \$3 2459						
5 (part) and 7. (144,062)	Mixed refuse, principally ashes (no kitchen wastes)...	55,044		\$2 0731	\$0 0551	\$2 1282	\$115,115 16		\$3,035 00			To inland dumps.
	Garbage, principally kitchen wastes.....	13,828		3 6237	0 0049	3 6286	50,108 88		68 75			Boston Development and Sanitary Company.
	Store refuse, principally paper.....	426		2 8051		2 8051	1,195 02					To inland dumps.
			69,298					166,419 06		\$3,103 75	\$169,522 81	1 1767
				Av. \$2 4014	Av. \$0 0448	Av. \$2 4462						
8 and 9. (118,488)	Mixed refuse, principally ashes (no kitchen wastes)...	76,330		\$2 0616	\$0 0627	\$2 1293	\$157,780 17		\$4,811 59			39,994 tons to sea; 45,039 tons to Boston Development and Sanitary Company.
	Garbage, principally kitchen wastes.....	19,330		2 8052	0 0869	2 8921	54,224 43		1,680 49			Boston Development and Sanitary Company.
	Store refuse, principally paper.....	6,237		3 0876	0 9171	4 0047	19,257 42		57 20			
			101,897					231,262 02		\$6,549 28	\$237,811 30	2 0070
				Av. \$2 3436	Av. \$0 0548	Av. \$2 3984						
10. (87,686)	Mixed refuse, principally ashes (no kitchen wastes)...	53,405		\$1 7611		\$1 7611	\$94,081 05		\$5 07			To sea.
	Garbage, principally kitchen wastes.....	6,400		3 0426		3 0426	19,472 99					Boston Development and Sanitary Company.
	Store refuse, principally paper.....	1,419		6 4960		6 4960	9,217 93					City Refuse Utilization Company.*
			61,224					122,771 97		\$5 07	\$122,777 04	1 3994
				Av. \$2 0052		Av. \$2 0052						
Hyde Park. (10,575)	Garbage, principally kitchen wastes.....	932	932	\$3 2562		\$3 2562	\$3,034 84	3,034 84			\$3,034 84	0 1850
	Contract, Boston Development and Sanitary Com- pany.....								\$112,652 47	112,652 47	112,652 47	
482,031	Totals.....		275,366	Av. \$2 0081	Av. \$0 4409	Av. \$2 4490		\$628,522 85		\$123,894 09	\$752,416 74	\$1 5609

Total, as above..... \$752,416 74
Add total of contract table (page 361)..... 172,901 82
Net amount of appropriation..... \$925,318 56

* Contracts for disposal.
† Population, 16,376, duplicated in contract table.

Details of Collected Refuse in the City of Boston for the Year Ending January 31, 1914.

CITY OF BOSTON SANITARY DISTRICTS 1913



HIGHWAY DIVISION—STREET CLEANING AND OILING SERVICE.

Items of Expenditure for the Year.

Street Cleaning Branch.

General administration		\$21,162 65
Salary of division engineer (in part), ...	\$875 00	
Salary of supervisor (in part)	762 27	
Salary of medical inspector (in part), ...	360 27	
Salary of general foreman	2,560 51	
Salary of inspector of uniforms (in part)	1,035 09	
Stationery	108 95	
Postage	116 21	
Printing	891 45	
Telephone service	474 12	
Advertising	2 60	
Incidentals	17 40	
Coffee	\$2 15	
Experimental work	4 75	
Photographs	3 00	
Engineer's services	7 50	
Automobile repairs and maintenance	2,809 11	
Supplies	\$206 61	
Garage rent	181 50	
Gasolene, oil, etc.	304 54	
Tubes, tires, cases, new, ...	571 57	
Tubes, tires, cases, repairs of	62 95	
Engine and body repairs	371 94	
Wages of chauffeur, general foreman	1,110 00	
Wages of supervisor's chauffeur (in part)	278 25	
Annuity, chapter 569, Acts of 1898, ...	300 00	
Pensions paid to veterans, Civil War (retired)	3,472 46	
Pensions paid to retired laborers	5,571 53	
Uniforms	1,527 43	
<i>Carried forward</i>		<u>\$21,162 65</u>

<i>Brought forward</i>		\$21,162 65
General expenses, other than general administration		111,430 93
Wages of stablemen	\$23,500 76	
Wages of yardmen	6,125 68	
Wages of watchmen	5,307 49	
Wages of foremen's drivers	970 58	
Wages of yard clerks and messengers, ...	2,680 54	
Veterinary services and medicines	1,600 47	
Hay and straw	17,027 99	
Grain	15,439 84	
Wagons and carriages, repairs	1,947 38	
Harnesses, new and repairs	2,738 38	
Horseshoeing	7,274 00	
Horses, new	10,963 70	
Horses, clipping of	57 00	
Horses, outside board and care of	3,839 00	
Stables and yards, rent of	3,280 86	
Stables and yards, taxes on	844 99	
Stables and yards, blankets, coverings, brushes, oils, greases, polishes, furnishings	3,789 11	
Stables and yards, buildings, repairs	2,444 94	
Electric light, yards and stables	1,128 20	
Fuel, yards and stables	470 02	
Operating expenses		392,352 31
District foremen, salaries of	\$15,413 39	
Subforemen, wages of, on paved streets gutters, crossings, snow work, patrolling, etc.	30,324 12	
Laborers, wages of, on paved streets, gutters, crossings, snow work, patrolling, etc.	255,095 73	
Hired teams, on paved streets, gutters, crossings, snow work, patrolling, etc.	16,391 35	
Horses, driving, hire of	198 00	
Holidays, pay allowed	30,878 85	
Pay allowed injured employees	1,802 63	
Dumps, labor on	3,761 35	
Dumps, rent of	10,282 71	
Snow license (part cost)	500 00	
Flushing machines, new	2,312 20	
Flushing machines, repairs	671 03	
Sweeping machines, repairs, etc.	3,888 66	
Water carts, repairs, etc.	1,190 04	
Carts, repairs	6,899 84	
<i>Carried forward</i>	\$512,203 48	\$524,945 89

<i>Brought forward</i>	\$512,203 48	\$524,945 89
Snowplows, road machines, etc., new	624 00	
Snowplows, road machines, etc., re- pairs	281 22	
Push brooms, team brooms, handles, etc.	2,187 00	
Hoes, shovels, picks, etc.	1,169 13	
Machine brooms and cores	4,295 00	
Push carts and barrels	1,929 50	
Refuse boxes	1,056 51	
Sand barrels and boxes	46 37	
Sand (used on slippery streets)	564 35	
Hose, for flushing machines	192 78	
Hose, for watering carts	72 90	
Calcium chloride, for watering streets	323 65	
Total expenditures		<u>\$524,945 89</u>

Street Oiling and Watering Branch.

General administration		\$7,089 18
Salary of division engineer (in part), ...	\$375 00	
Salary of supervisor (in part)	762 27	
Salary of medical inspector (in part), ...	154 40	
Salary of general foreman	1,499 48	
Salary of inspector of uniforms (in part)	77 91	
Wages of messenger	262 00	
Stationery	46 69	
Printing	272 11	
Postage	107 32	
Advertising	4 10	
Telephone service	55 94	
Traveling expense	21 00	
Damages to property	66 35	
Analyses of oils	35 00	
Engineer's services	2 50	
Express charges	1 70	
Automobile expense, general fore- man	2,952 19	
New Rambler	\$1,200 00	
Registration	10 00	
Garage rent	180 00	
Gasolene, oil, etc.	230 81	
Tubes, tires, cases, new, ...	364 20	
Tubes, tires, cases, re- pairs	38 46	
<i>Carried forward</i>	\$2,023 47	<u>\$6,695 96</u>
		<u>\$7,089 18</u>

<i>Brought forward</i>	\$2,023 47	\$6,695 96	\$7,089 18
Engine and body re-			
pairs	793 49		
Supplies	104 45		
Wages of chauffeur (gen-			
eral foreman)	30 78		
Wages of supervisor's chauffeur (in			
part)		278 25	
Uniforms		114 97	
General expenses, other than general adminis-			
tration			4,782 88
Wages of stablemen, watchmen and			
yardmen	\$2,281 31		
Veterinary services and medicines	34 64		
Hay, straw and grain	684 89		
Wagons and carriages, repairs	319 55		
Harnesses, new and repairs	97 62		
Horseshoeing	132 50		
Horses, new	325 00		
Yard and stables, blankets, covers,			
brushes, oils, greases, polishes,			
furnishings	427 81		
Yard and stable buildings, repairs	368 91		
Light and fuel	47 75		
Bicycles, repairs	62 90		
Operating expenses			216,639 44
Inspector, wages, water distribu-			
tion	10,843 11		
Inspectors, wages, oil distribution	2,957 13		
Inspectors, wages, oil, plants and			
cars	1,225 00		
Laborers, wages, water distribution, ...	176 63		
Laborers, wages, oil distribution	3,835 26		
Laborers, wages, oil, plants and cars, ...	5,638 44		
Laborers, wages, calcium chloride	519 87		
Chauffeurs and operators on auto			
trucks	360 42		
Hired teams, oil distribution	12,001 50		
Hired teams, water distribution	67,777 31		
Hired teams, plants	1,007 63		
Hired teams, calcium chloride	418 36		
Pay allowed injured employees	100 00		
Holidays, pay allowed	1,350 10		
Fuel, used at plants	666 64		
Oil plants, repairs and furnishings	1,020 43		
Standpipes, repair and maintenance, ...	2,230 67		
Calcium chloride	1,377 09		
Road oil	94,788 33		
Soap, emulsifying	2,734 87		
<i>Carried forward</i>	\$222,900 85	\$228,511 50	

<i>Brought forward</i>	\$222,900 85	\$228,511 50
Lime, ash, sand, etc.	39 93	
Sand and oil, labor mixing	54 19	
Automobile truck, repairs and main- tenance	459 69	
Automobile express, repairs and maintenance	137 63	
Oil and water carts, repairs	3,138 63	
Tools	15 67	
Rent, Whittemore car siding, Mt. Hope	215 00	
Freights and demurrage on oil cars	1,549 91	

Total expenditures	<u>\$228,511 50</u>
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Total, Street Cleaning Branch	\$524,945 89
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Total, Street Oiling and Watering Branch	228,511 50
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Grand total	<u>\$753,457 39</u>
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Miles and Areas of Streets Cared for, Year 1913-14.

DISTRICT No.	Location.	MILES OF STREETS CARED FOR.		SQUARE YARDS CARED FOR.		Total Square Yards.
		Paved.	Macadam.	30-foot Roadway. Paved.	Macadam. 9-foot Wide Gutters.	
1.....	South Boston.....	20.19	17.82	424,000	94,090	518,090
2.....	East Boston.....	7.21	19.23	154,000	101,535	255,535
3.....	Charlestown.....	12.91	11.60	293,000	61,250	354,250
6.....	Dorchester (part).....	9.26	24.32	201,000	128,410	329,410
7.....	Roxbury.....	17.32	9.29	383,000	49,050	432,050
8.....	South End (uptown).....	11.16	12.01	225,000	63,415	288,415
8.....	South End (downtown)....	28.20	1.22	570,000	6,440	576,440
9.....	Back Bay.....	12.46	18.00	252,000	95,040	347,040
10.....	North and West Ends.....	20.83	0.94	421,000	4,965	425,965
Totals.....	.....	139.54	114.43	2,923,000	604,195	3,527,195

Summary.

ITEMS.	STREET CLEANING BRANCH.		STREET OILING AND WATERING BRANCH.	
	1912-1913.	1913-1914.	1912-1913.	1913-1914.
Labor.....	\$365,620 84	\$382,842 51	\$28,045 84	\$32,727 46
Teaming.....	15,223 54	16,589 35	69,694 47	81,204 80
Supplies and repairs.....	106,454 45	125,514 03	101,253 62	114,579 24
Totals.....	\$487,298 83	\$524,945 89	\$198,993 93	\$228,511 50

Amount of Hay, Straw, Oats and Shorts Used by the Street Cleaning and Oiling Service for the Year 1912-13.

	Amount Used.	PRICE PAID.	
		Highest.	Lowest.
		Per Ton.	
Hay	1,111,822 lbs.	\$22 50	\$18 25
Straw	68,248 lbs.	21 75	18 00
Shorts	47,500 lbs.	28 00	23 00
		Per Bushel.	
Oats	30,166 bu.	\$0 52 $\frac{3}{4}$	\$0 41

Distribution of Horses and Rolling Stock January 31, 1914.

ITEMS.	Oil Plants.	DISTRICTS.					South Stable.	West Stable.	Total.
		1.	2.	3.	6.	7.			
Horses, cart.....	1	18	11	11	8	16	61	33	159
Horses, driving.....	3	2	1	1	1	2	5	1	16
Carts, single.....	16	8	10	11	14		49	28	136
Carts, watering....	13	1	1	1	2	1	6	2	27
Machines:									
Single.....				1			7		8
Double.....		4	2	2	2	4	15	9	38
Flushing.....						1	9	1	11
Road.....			1	1	1	1	6	2	12
Wagons:									
Express.....	1	1	1	1	1	1	2	1	9
Concord.....				1	1	1	2		5
Exercising.....							1		1
Snowplows.....		1	1	1			3	1	7
Buggies.....	3	2	2	1	1	1	5	1	16

Cost of Maintaining Horses on a Basis of 365 Days Per Year.

DISTRICTS.	SOUTH BOSTON.		EAST BOSTON.		CHARLESTOWN.		DORCHESTER.		ROXBURY.		WEST STABLE.		SOUTH STABLE.		TOTALS.	
	19.64		11.87		12.11		13.25		21.11		35.25		45.53		158.76	
ITEMS.	TOTAL COST.		TOTAL COST.		TOTAL COST.		TOTAL COST.		TOTAL COST.		TOTAL COST.		TOTAL COST.		TOTAL COST.	
	Per Year.	Per Horse per Day.	Per Year.	Per Horse per Day.	Per Year.	Per Horse per Day.	Per Year.	Per Horse per Day.	Per Year.	Per Horse per Day.	Per Year.	Per Horse per Day.	Per Year.	Per Horse per Day.	Per Year.	Per Horse per Day.
Labor.....	\$5,087 52	\$0 7087	\$3,135 50	\$0 7241	\$2,300 15	\$0 5204	\$1,360 58	\$0 2814	\$3,840 75	\$0 4985	\$7,225 18	\$0 5615	\$12,296 06	\$0 7399	\$35,245 74	\$0 6083
Hay and grain.....	3,607 75	0 5033	2,157 53	0 4983	2,314 20	0 5236	391 12	0 0809	3,823 28	0 4963	6,764 52	0 5207	14,094 32	0 8481	33,152 72	0 5722
Fuel, light and rent..	1,274 23	0 1777	2,427 32	0 5606	162 30	0 3367	.....	.....	266 70	0 0346	232 68	0 0180	471 16	0 0283	4,834 39	0 0834
Shoeing.....	753 95	0 1051	607 75	0 1403	574 00	0 1299	428 00	0 0885	738 75	0 0959	1,350 50	0 1049	2,821 05	0 1098	7,274 00	0 1255
Stable repairs.....	57 15	0 0081	.....	.....	4 623 86	0 1411	.....	.....	1,272 21	0 1651	459 42	0 0367	220 90	0 0133	2,633 54	0 0454
Veterinary services and medicine.....	198 51	0 0277	108 00	0 0249	159 25	0 0360	120 00	0 0248	193 15	0 0251	57 40	0 0044	798 80	0 0481	1,635 11	0 0282
Furnishings and repairs.....	402 26	0 0561	186 03	0 0429	133 49	0 0302	169 73	0 0351	341 65	0 0443	969 65	0 0747	1,439 73	0 0866	3,642 54	0 0629
Hire of driving horses.....	.....	.....	.....	.....	136 00	0 0308	25 00	0 0051	.....	.....	.....	.....	37 00	0 0022	198 00	0 0034
Outside board and care of horses.....	.....	.....	.....	.....	.....	.....	3,839 00	0 7940	.....	.....	.....	.....	.....	.....	3,839 00	0 0662
Miscellaneous.....	6 00	0 0008	4 00	0 0009	5 00	0 0011	6 00	0 0012	.....	.....	3 00	0 0002	33 00	0 0019	57 00	0 0010
Totals.....	\$11,387 37	\$1 5880	\$8,626 13	\$1 9921	\$6,408 25	\$1 4498	\$6,339 43	\$1 3111	\$10,476 49	\$1 3598	\$17,062 35	\$1 3260	\$32,212 02	\$1 9383	\$92,512 04	\$1 5966

¹ Of 4,835 horses' days 3,839 horses' days were in outside stable.

² Includes \$712.53 paid for taxes and \$1,560.86 paid for rent.

³ Includes \$1,014 paid for rent and water taxes.

⁴ Thorough overhauling of stable drainage and ventilation.

⁵ Includes cost of building addition.

SNOW WORK.

Cost of Snow Work and Volume of Snow Removed.

DISTRICTS.	Snow Work on Cross- ings and Gutters. Total Cost.	SNOW REMOVAL.			
		Total Cost. *	Single Loads of Snow Removed. †	Cubic Yards Removed. †	Cost per Cubic Yard Removed. *
1. South Boston.....	\$1,593 71	\$1,392 11	792	2,059	\$0 67
2. East Boston.....	254 28	391 13	843	2,192	0 18
3. Charlestown.....	329 16	558 88	382	993	0 56
6. Dorchester.....	491 87	524 51	392	1,019	0 51
7. Roxbury.....	700 26	405 97	402	1,045	0 38
8. Uptown.....	716 17	901 23	337	876	1 03
8. Downtown.....	1,691 08	6,393 52	2,795	7,267	0 88
9. Back Bay.....	508 65	660 31	887	2,306	0 28
10. West End and North End.....	2,046 47	6,792 82	2,253	5,858	1 16
11. Patrol System.....	4,069 91	2,199 40	522	1,357	1 62
Totals.....	\$12,401 56	\$20,219 88	9,605	24,972	.....
Average.....					\$0 81

* Includes Sundays paid time and one-half, holidays paid double time.

† Street Cleaning Branch loads, 2.6 cubic yards.

Summary.

ITEMS.	Cost of Inspection, Labor and Teaming.	Cost of all Other Charges.	Total Cost.	AMOUNT OF SNOW REMOVED.		Cost per Load Removed.	Cost per Cubic Yard Removed.
				Loads.	Cubic Yards.		
Snow removal.....	\$14,092 51	\$6,127 37	\$20,219 88	9,605	24,972	\$2 10	\$0 81
Snow crossings and gut- ters.....	11,761 29	640 27	12,401 56	.....	.....	.....	.....
Totals.....	\$25,853 80	\$6,767 64	\$32,621 44				

Flushing.

Cost of Supervision.	Cost of Labor and Teams.	Cost of Repairs and Tools.	* Cost of All Other Charges.	† Total Cost.	Square Yards Flushed Once.	Total Gallons of Water Used.	Gallons of Water Used per Square Yard.	Cost per Thousand Square Yards Flushed Once.
\$1,322 72	\$8,043 21	\$3,595 02	\$8,601 80	\$21,562 75	136,654,469	12,485,500	.0913	\$0.1577

* Cost of new machines, \$2,312.20, included.

† Cost of water not included.

Push Cart, Team and Box Patrols and Collections.

DISTRICTS.	TEAM PATROL.					PUSH CART COLLECTION.							
	Inspection, Labor and Teaming.	All Other Changes.	Total Cost.	Number of Loads Collected.	Number of Cubic Yards Collected.	Cost per Cubic Yard.	Inspection, Labor and Teaming.	All Other Changes.	Total Cost.	Number Barrels Collected.	Cubic Yards Collected.	Cost pe Barrel Collected.	Cost per Cubic Yard Collected.
1.....	\$701 37	\$441 84	\$1,143 21	283	566	\$2 02	\$2,694 27	\$622 16	\$3,316 43	5,344	910	\$0 621	\$3 46
2.....	897 62	846 37	1,743 99	327	654	2 67	2,099 51	201 80	2,301 31	4,297	732	0 535	3 14
3.....	1,497 42	1,167 39	2,664 81	555	1,110	2 40	2,273 57	267 49	2,541 06	2,848	485	0 892	5 24
6.....	1,159 88	624 24	1,784 12	383	766	2 33	553 47	47 93	601 40	.....	.....	.....	.....
7.....	643 04	333 91	976 95	347	694	1 41	8,846 30	1,336 29	10,182 59	21,321	3,632	0 477	2 80
8. Uptown.....	814 61	395 59	1,210 20	129	258	4 69	.....	.....	.....	.....	.....	.....	.....
8. Downtown....	1,028 68	503 74	1,532 42	212	424	3 61	.....	.....	.....	.....	.....	.....	.....
9.....	870 53	492 65	1,363 18	165	330	4 13	102 04	5 13	107 17	.....	.....	.....	.....
10.....	7,124 81	2,585 66	9,710 47	2,090	4,180	2 32	8,572 81	521 50	9,094 31	15,898	2,709	0 572	3 36
11.....	1,496 65	1,572 62	3,069 27	415	830	3 70	65,983 02	10,867 50	76,850 52	117,648	20,044	0 653	3 83
Totals.....	\$16,234 61	\$8,964 01	\$25,198 62	4,906	9,812	.....	\$91,124 99	\$13,869 80	\$104,994 79	167,356	28,512	.....	.....

Subway patrol	.	.	.	.	.	\$1,067 10
Refuse box collection	.	.	.	.	.	\$6,247 91
Sanding streets	.	.	.	.	.	\$1,835 06
Number of boxes collected	.	.	.	.	.	62,152
Capacity of barrels:						
Wooden	.	.	.	.	.	4 6 cubic feet.
Metal	.	.	.	.	.	3 0 cubic feet

Machine Sweeping of Paved Streets and Gutters.

DISTRICTS.	PAVED STREETS.		GUTTERS.		TOTAL.	PAVED STREETS AND GUTTERS.				LOADS OF DIRT REMOVED.		CUBIC YARDS OF DIRT REMOVED.	
	Square Yards Cleaned Once.	Equiva- lent Mileage of 30-foot Roadway Cleaned Once.	Square Yards Cleaned Once.	Miles Cleaned Once.	Square Yards Cleaned Once.	Inspection, Labor and Teaming.	All Other Charges.	Total Cost.	Cost per Mile Cleaned Once.	Cost per Thousand Square Yards Cleaned Once.	Total. Thousand Square Yards.	Per Thousand Square Yards.	Cost per Cubic Yard Dirt Re- moved.
1.....	34,987,576	1,987.93	6,588,816	1,247.88	41,576,392	\$26,460 80	\$14,380 93	\$40,841 73	\$12 62	\$0 982	13,239	.32	\$1 54
2.....	11,972,608	680.26	3,901,865	756.03	15,964,473	14,901 97	10,441 07	25,343 04	17 64	1 587	7,495	.47	1 69
3.....	29,586,983	1,681.08	2,265,447	429.06	31,852,430	18,786 18	7,835 05	26,621 23	12 62	845	8,089	.25	1 65
6.....	7,263,100	412.65	3,132,317	593.24	10,395,417	15,554 89	8,374 54	23,929 43	23 79	2 302	8,051	.77	1 49
7.....	30,302,222	1,721.72	3,358,925	636.16	33,661,147	17,846 93	9,418 27	27,265 20	11 56	809	7,731	.23	1 76
8. Uptown.....	36,046,467	2,048.09	3,821,304	723.73	39,867,771	121,679 52	210,327 60	32,007 12	11 58	802	7,114	.18	2 27
8. Downtown...	108,455,333	6,162.23	382,907	72.52	108,838,240	39,130 96	22,729 70	61,860 66	9 92	559	12,688	.12	2 44
9.....	13,191,711	749.52	3,900,987	738.83	17,092,698	31,971 75	4,536 29	18,408 04	12 37	1 079	4,736	.27	1 94
10.....	75,154,419	4,270.02	618,786	117.19	75,773,205	39,785 62	23,492 48	63,278 10	14 42	835	15,596	.21	2 03
11.....						617 46	265 93	883 39					
Totals.....	346,960,419	19,713.50	28,061,354	5,314.64	375,021,773	\$207,736 08	\$112,701 86	\$320,437 94			84,739		
Averages....									\$14 06	\$1 088		.31	\$1 78

¹ Includes \$20.11 expended on public alleys.

² Includes 10.01 expended on public alleys.

³ Includes 316.01 expended on public alleys.

⁴ Includes 158.79 expended on public alleys.

⁵ Includes \$505.62 expended on public alleys.

STREET OILING.

Showing Cost of Labor, Teaming, Oil, etc., Including Superintendence, 1913.

Districts.	Total Area Oiled (Square Yards).	Equivalent Mileage, 30-foot Roadway.	Area Covered (Once) (Square Yards).	DATES OF OILING.		Average Number of Times Dis- trict Treated.	Total Cost.	COST PER SQUARE YARD.		Gallons Used.	Gallons per Square Yard of Oiled Area.	Total Water Used (Gallons).
				First.	Last.			Covered Once.	Entire Season.			
1. South Boston.....	558,869	31.7539	4,030,530	April 10	Nov. 12	7.2119	\$10,885 73	\$0 0027	\$0 01947	135,796	.24299	396,450
2. East Boston.....	483,371	27.4642	3,420,074	April 2	Nov. 7	7.0754	7,996 27	00233	01654	95,240	.19703	275,850
3. Charlestown.....	155,684	8.8456	1,261,839	April 22	Sept. 27	8.1051	3,852 01	00305	02474	31,119	.19988	94,950
4. Brighton.....	770,644	43.7865	3,481,964	March 19	Dec. 16	4.5182	14,031 33	00429	0182	186,132	.24152	609,800
5. West Roxbury.....	1,187,599	67.4772	4,206,976	April 10	Nov. 25	3.5424	17,031 46	00404	01434	216,070	.18193	582,300
6 and 9. Dorchester.....	1,531,639	87.0249	8,122,892	March 19	Dec. 15	5.3033	29,078 22	00357	01898	411,008	.26834	1,083,808
7. Roxbury.....	1,137,261	64.6171	6,512,108	March 26	Dec. 17	5.7261	24,889 46	00382	02188	326,755	.2873	1,006,441
8 and 10. South End, Back Bay and part of Roxbury...	699,541	39.7466	6,828,509	March 19	Dec. 21	9.7614	23,118 87	00385	03304	272,023	.38886	778,950
11. Hyde Park.....	578,894	32.8917	1,965,738	April 24	Nov. 3	3.3956	7,448 02	00378	01286	84,220	.14548	249,300
Totals.....	7,103,502	403.6077	39,830,630	.....	.....	54.0394	\$138,331 37	\$0 03143	\$0 18005	1,758,363	2.15333	5,077,849
Averages.....	.....	.....	.....	.....	.....	5.607	.....	\$0 00344	\$0 01947	.....	.2475	.....

NOTE.— 1913. Cost of 1 square yard (for season), \$0.01947.
 1912. Cost of 1 square yard (for season), \$0.01827.

AREA WATERED, 1913.

Total Cost per Square Yard and Amount of Water Used.

DISTRICTS.	Total Square Yards Watered.	EQUIVA- LENT MILEAGE 30-FOOT ROADWAY.	DATES OF WATERING.		Number of Days One or More Carts Out.	Total Cost.	Cost per Square Yard.	Cart- days Worked.	Loads Spread During Season.	Square Yards Covered Once.	Total Gallons of Water Used.
			First.	Last.							
			1913.	1913.							
South Boston.....	476,547	27.0765	Feb. 3	Dec. 21	212	\$10,674 59	\$0 02239	1,639	24,505	103,257,000	14,751,000
East Boston.....	136,225	7.74	Feb. 3	Dec. 21	199	4,967 94	03646	626	9,390	39,438,000	5,634,000
Charlestown.....	251,950	14.3153	Mar. 9	Dec. 31	196	6,080 70	02413	832	12,380	51,996,000	7,428,000
Brighton.....	98,954	5.6223	Mar. 9	Dec. 31	198	4,646 93	04696	622	9,330	39,186,000	5,598,000
West Roxbury.....	127,575	7.2485	Mar. 9	Dec. 31	200	6,563 61	05144	810	12,150	51,030,000	7,290,000
Dorchester.....	192,452	10.9342	Feb. 2	Dec. 31	217	10,647 81	05532	1,558	23,370	98,154,000	14,022,000
				1914.							
Roxbury.....	189,873	10.7882	Feb. 2	Jan. 15	229	10,235 65	0539	1,406	21,090	88,578,000	12,654,000
South End and part of Rox- bury.....	585,954	33.2928	Feb. 2	Jan. 19	248	17,388 58	02967	2,647	39,705	166,761,000	23,823,000
City Proper.....	553,404	31.4434	Feb. 3	Jan. 19	239	16,066 29	02975	2,476	37,140	155,988,000	22,284,000
				1913.							
Hyde Park.....	50,264	2.8559	Mar. 23	Dec. 21	183	2,908 03	05785	292	4,380	18,396,000	2,628,000
Totals.....	2,663,198	151.3171				\$90,180 13	\$0 40787	12,908	193,520	812,784,000	116,112,000
Average.....							03386				

NOTE.—1913, cost per square yard for the season, \$0.03386; 1912, cost per square yard for the season, \$0.03565.

STREET WATERING.—1913.

MONTH.	Days Out.	Cart-days Worked.	Average Cart-days Worked.	Number of Carts Out.	Average Number of Carts Out.	Cost of Teaming.	Average Cost per Cart, Teaming.	Cost of Labor.	Total Cost Teaming and Labor.	Average Cost per Cart, Teaming and Labor.
1913.										
February.....	4	50	12	57	14	\$241 42	\$56 09	\$534 76	\$3,451 40	\$66 37
March.....	12	541	45	623	52	2,916 64	104 92	787 40	8,551 70	115 56
April.....	21	1,465	70	1,563	74	7,764 30	130 15	978 58	12,301 97	141 40
May.....	25	2,133	85	2,187	87	11,323 39	144 28	839 86	12,526 88	154 65
June.....	28	2,227	80	2,272	81	11,687 02	153 83	902 26	12,594 40	165 72
July.....	31	2,209	71	2,358	76	11,692 14	138 55	1,099 53	10,659 25	154 48
August.....	28	1,814	65	1,937	69	9,559 72	115 46	952 97	8,342 40	130 35
September.....	23	1,421	62	1,463	64	7,389 43	37 26	1,349 82	3,011 05	64 07
October.....	8	289	36	377	47	1,661 23	75 65	1,393 51	3,890 11	117 88
November.....	16	469	29	528	33	2,496 60				
December.....	16	259	16	300	19	946 84				
1914.										
January.....	7	32	5	39	6	389 85				
Totals.....	219	12,909	576	13,704	622	\$68,068 58	\$956 19	\$8,838 69	\$75,329 16	\$1,110 48
Less February and December, 1913, and January, 1914.....	192	12,568	543	13,308	583					
Average per month, March to November, inclusive.....	21½	1,396½	60½	1,478⅔	64½		106 24			123 39

NOTE.—Average cost for one cart for one month, 1913, \$123.39 for a period of nine months; average cost for one cart for one month, 1912, \$131.59 for a period of eight months.

DISTRIBUTION OF EXPENDITURES.

Removing snow	\$20,219 88	
Snow work on crossings and gutters	12,401 56	
		\$32,621 44
Flushing streets		21,562 75
Street patrolling by teams	\$25,198 62	
Street patrolling by push carts	104,994 79	
Cleaning of subway passage	1,067 10	
Collection of refuse boxes	6,247 91	
		137,508 42
Cleaning of paved streets and gutters	\$319,932 32	
Cleaning of public alleys	505 62	
		320,437 94
Sanding of slippery streets		1,835 06
		\$513,965 61
Purchase of new horses	\$10,963 70	
Work performed for Sanitary Service	16 58	
		10,980 28
Total expenditures, Street Cleaning Branch		\$524,945 89
Oiling of public streets and ways	\$138,331 37	
Watering of public streets and ways	90,180 13	
Total expenditures, Street Watering and Oiling Branch		228,511 50
Total expenditures, Street Cleaning and Oiling Service		<u>\$753,457 39</u>

APPENDIX D.

REPORT OF THE DIVISION ENGINEER OF
THE SEWER AND WATER DIVISION.

FEBRUARY 2, 1914.

MR. L. K. ROURKE,

Commissioner of Public Works:

DEAR SIR,—I respectfully submit the following report of the income, expenditures and operation of the Sewer and Water Division for the year 1913.

SEWER SERVICE.

The more important items of work completed during 1913, or in progress at present, together with a brief list of the work which it is intended to do in 1914, are as follows:

BRIGHTON.

Two thousand one hundred and fifty-four linear feet of 2-foot 6-inch concrete and pipe surface drains in Brainerd road.

Three hundred and fifty feet of 6-foot 6-inch by 5-foot concrete conduit in Commonwealth avenue, at St. Lukes road.

Two thousand nine hundred and thirty-five linear feet of pipe sewers and surface drains in Oakland street.

Contemplated.

The Telford street outlet across Charles River Reservation and through Telford street, between Charles river and Western avenue. This is to be a 5-foot 6-inch storm water outlet and is needed for the relief of the Everett street area.

A portion at least of the 7,500 linear feet of 6-foot by 10-foot 6-inch concrete conduit for the easterly branch of Shepard brook, between Charles river and Everett street, should be put in.

It is desirable also to build a sewer and surface drain in Mt. Vernon street, with outlets in Foster street and private land, to the Faneuil valley sewer and conduit, and a concrete and pipe surface drain in Waverly street.

EAST BOSTON.

The 5-foot by 6-foot concrete culvert between Bennington and Saratoga streets was completed and pipe surface drains built in Thurston street, Butler avenue, Breed and Saratoga streets; also a sewer and surface drain system in Geneva street, between Gove and Porter streets.

Contemplated.

One thousand one hundred linear feet of 5-foot 3-inch by 4-foot 9-inch concrete surface drain should be built in Frankfort street, between Prescott road and Neptune road, and in Neptune road on the northwest side, between Orleans and Cottage streets, and on south-east side, between Orleans street and Boston, Revere Beach & Lynn Railroad, about 3,000 linear feet of 3-foot 6-inch concrete and pipe surface drains.

The sewer in Border street, between Sumner street and Central square, has broken down several times and should now be rebuilt; and also the Webster street sewer, between points 60 feet and 220 feet east of Orleans street.

CHARLESTOWN.

Nothing built during 1913.

Contemplated.

About 1,700 linear feet of the Rutherford avenue sewer, between Middlesex and Cambridge streets, is in a dangerous condition and should be rebuilt; as should also the old slate, wood and brick sewer in Thompson street, between Warren and Main streets.

WEST ROXBURY.

The West Roxbury low level sewer was completed to Florence street by building 2,687 linear feet of 2-foot 6-inch by 3-foot concrete sewer.

A sewer system was built in Spring, Baker and Gardner streets, between Charles river and Heldun street, aggregating 6,500 linear feet of 3-foot 9-inch concrete surface drain and pipe sewers and surface drains.

In Anawan avenue, 2,900 linear feet of pipe sewers and 3,400 linear feet of 3-foot 3-inch to 4-foot 6-inch circular concrete surface drain were built.

In Montclair avenue, between Merlin and Centre streets, there were built 680 linear feet of pipe sewer and 2,500 linear feet of pipe surface drain.

Work is in progress on the Spring street brook conduit in private land, between Summer and Centre streets.

Contemplated.

The Roslindale brook conduit should be extended from its present terminus at Anawan avenue to Centre street. This would allow of the building of surface drains and catch-basins throughout the whole valley between Beech street and Mt. Vernon street. This is highly desirable as it would remove a large amount of storm water from the Roslindale main sewer, which has a direct connection with the Metropolitan main sewer and pours such a large flood of water into it during storms as to cause some complaint on the part of the Metropolitan Commission.

Surface drain systems should be built in the Auburn street brook area, in Centre street, between Day and Green streets, and in Green street, between Washington and Centre streets, the latter not only to separate the system but also to relieve the existing sewer system.

A start should be made on the Temple street brook conduit between the metropolitan sewer at Farragut street and Temple street at the Needham Branch Railroad.

Surface drains should be built in Central and Centre streets, between the New York, New Haven & Hartford Railroad and Montclair avenue, and in Parkman road, between Jamaica way and Perkins street.

DORCHESTER.

In the Neponset Playground a 4-foot 9-inch by 4-foot 6-inch concrete conduit was built from the railroad to Neponset avenue, putting out of sight the offensive channel.

Across Hallet street a 7-foot 9-inch by 6-foot 2-inch double reinforced concrete conduit to form a part of the permanent channel of Davenport brook; this work was made necessary by the construction of Hallet street.

Surface drainage system in Wellington Hill street and in Ballou avenue.

Separate systems were installed in Roach street, Vesta road and Bowdoin street.

A pipe sanitary sewer built in Dorchester avenue, between Freeport street brook and Savin Hill avenue, also in Adams street, Beach street, Cameron street, Downer court and Harrison park.

The brick intercepting sewer, 5 feet in diameter, in Auckland street, between Freeport street brook and Hoyt street, rebuilt in concrete, was completed.

Contemplated.

The completion of the Mattapan brook conduit and accompanying sewer in Astoria street and private land, between Norfolk and Delhi streets, and the Davenport brook conduit (north branch) in private land between Burt and Washington streets.

Completion of the separate system of sewers in Ballou and Woodrow avenues and Lyons street, and of the surface drain in Blue Hill avenue, between Deering road and Stratton street.

Construction of the Davenport brook conduit main channel, from a point 820 feet easterly of Adams street to Magdala street.

Davenport brook conduit, south branch, from Codman street to Dorchester avenue. Rebuilding of old and defective sewers in Springdale street, between the New York, New Haven & Hartford Railroad and Denny street, and in Dorchester avenue, from Hyde street 155 feet northerly. Systems of sanitary sewers in the Rugby district of Dorchester and Hyde Park.

HYDE PARK.

Pipe sanitary sewers were built throughout the Pinehurst district, where cesspools afforded the only means of sewage disposal; 15,292 linear feet of sanitary sewers were built.

In Hyde Park avenue a 2-foot 9-inch concrete conduit, connecting with Mother brook, was built to abolish the worst surface water nuisance in Hyde Park, viz., near the rear of Kennally's Block, in the center of the business district.

Contemplated.

Systems of sanitary sewers in:

The Readville district.

Hubbard street, from Metropolitan avenue to Huntington avenue.

Huntington avenue, from Jefferson street to Safford street.

Metropolitan avenue, from Vose street to Greenwood avenue.

Milton avenue and Washington place.

Thompson street, from Glenwood avenue to Franklin street.

Foster street and Washington street.

Rutledge road, from Blake street to Wood avenue.

Systems of surface drains in:

Hyde Park avenue, from Factory street to River street.

Dana avenue, from Hyde Park avenue to Folsom street, and in Folsom street.

Arlington street, from Hyde Park avenue to Providence street.

Providence street, from Arlington street to West street.

Outlet for Business street to Mother brook.

ROXBURY.

Separate systems of sewers were built in Huntington avenue, between Bryant and Gainsborough streets, in Munson street, Oak Grove terrace, Seaver and Sarsfield streets and in Van Ness street, also a concrete surface drain in Fenner street, Cobden street, etc., to relieve the floodings in Cobden street.

Contemplated.

The work contemplated for the coming year consists of the completion of the separate systems of drainage in the Cobden street district, the Harold street district and the Halleck street district.

It is also necessary that several streets in the Back Bay, such as Haviland street, Batavia street, etc., should be rebuilt.

SOUTH BOSTON.

The low level sewer consisting of 24-inch, 18-inch and 15-inch pipe, on piles, across the Commonwealth lands from Summer street to Northern avenue and in Northern avenue to the new Commonwealth and Fish Piers, was completed.

The pumping station in Summer street, near E street, to lift sewage from the system described above and

discharge into the old sewer in E street was completed and put in operation. This station is underground, automatic, electric, and contains two 10-inch Yeomans vertical, single suction, inclosed impeller pumps, driven by two 20 horse power Westinghouse motors, controlled by two Cutler-Hammer automatic switches. Total lift, about 13 feet.

A separate system was built in Sleeper street, the Kemp street overflow, a 10-foot 4-inch by 6-foot 3-inch concrete conduit, completed 500 feet into Old Harbor and the H street overflow extended 50 feet with 60-inch iron pipe.

Contemplated.

Separate systems in Old Colony avenue, from Hyde street to Mt. Vernon street, and in East First street extension, from H street to West First street. Surface drains in B street, from Frazer to Congress street, and in Southampton street, from the South bay sluiceway easterly. A half-tide dam in the South bay sluiceway at Southampton street, to keep the flats between that point and Massachusetts avenue covered in order to abate the nuisance arising from the sewage pollution flats.

CITY PROPER.

The main sewer for the South End improvement system, a double superposed structure, 6 feet 5 inches by 6 feet 5 inches and 6 feet 5 inches by 4 feet 2 inches, reinforced concrete, between Albany and Tremont streets, was finished.

A contract was let for the extension of the system northwest of Tremont street, and sewers built in Montgomery, Clarendon, Chandler, Buckingham, West Canton streets and Warren avenue. Sewers vary in size from 12-inch pipe to 9-foot by 4-foot reinforced concrete.

In the alleyway northwest of Tremont street and in Dartmouth street the old sewers are being rebuilt, sizes running from 3 feet 6 inches by 3 feet 6 inches to 4 feet 9 inches by 4 feet 9 inches. A contract was let for the pumping station machinery and contracts for the pumping station structure and outlet section through the Gately Wharf property to Fort Point channel. The machinery consists of four vertical centrifugal electric motor-operated pumping units,

together with all fitting, valves, switch boards, controllers, etc. The four units are as follows:

One 24-inch centrifugal pump, capacity 15,000 gallons per minute under $13\frac{1}{2}$ feet head.

Three 36-inch centrifugal pumps, capacity 30,000 gallons per minute, each under $13\frac{1}{2}$ feet head.

One 75 brake horse power constant speed, squirrel-cage, 3-phase, alternating current, induction motor, speed 240 revolutions per minute, with 60-cycle current at 440 volts.

Three 150 brake horse power motors, description same as above, speed 200 revolutions per minute, with current as above.

Contractors, the Epping Carpenter Pump Company of Pittsburgh, Pa.; contract price, \$34,836.

The pumping machinery is to be automatically started and stopped, and this station will be the largest sewage pumping station of this kind in the world.

The contract for the pumping station structure comprises a reinforced concrete chamber, below ground, 91 feet long by 40 feet wide by 29 feet deep, and a superstructure one story in height and 63 feet long by 40 feet wide. It also includes sewers to connect up with the main sewers built last year and this in Union Park street.

The aggregate value of the contract is \$60,520, of which about \$50,000 is for the pumping station. The contract for the outlet section through Gately's Wharf comprises about 293 linear feet of 4-foot 10-inch by 10-foot 6-inch gravity main and 2-foot 9-inch by 10-foot 6-inch force main placed side by side, all of reinforced concrete, also regulator, tide gates, etc., in Albany street.

On the Pleasant street widening, a separate system of sewers was designed and built, and is of a highly complicated nature. The old combined system had to be changed to the separate system in the middle of a district where no work of converting the old system to the separate system had as yet been done. The system put in had therefore to be fitted to operate as a separate system when the mains for the separate system shall have been brought up from Beacon street some years hence, while operating at present as a combined system; the existing sewers also were utilized, and the system,

on account of the width of the street, was made a double one, that is, a sewer and surface drain on each side of the street.

Separate systems of sewers were also built in Berkeley, Lime, North Anderson, Parkman and River streets.

The Transit Commission has constructed sewers in Boylston street, Summer street and Court street in conjunction with their work of subway building.

Contemplated.

On the South End improvement the pumping station is to be built and the extension of the system northwest of Tremont street is to be completed; in the alleyway and in Concord square, Greenwich park and alleyway north of Massachusetts avenue.

A separate system in Chestnut street, between Brimmer street and Charles river, rebuilding the old sewer.

The following old sewers rebuilt:

Waterford street, between Washington street and Shawmut avenue.

Church street, between Boylston and Providence streets.

Beach street, between Atlantic and Harrison avenues.

Kilby street, between Central and Milk streets.

Water street, between Broad and Congress streets.

Salutation street, between Hanover and Commercial streets.

A new sewer in Lucas street and a sewer for the widening in Avery street.

WATER SERVICE.

On August 20, 1913, the Metropolitan Water and Sewerage Board, under authority of chapter 694 of the Acts of 1912, acquired Fisher Hill Reservoir and 14.41 miles of large supply mains owned by the City of Boston in Brookline and Somerville, paying therefor the sum of \$150,000. This action terminates an undesirable condition which has existed since 1898; the fact that all the reservoirs and large mains outside of the city limits are now under one control undoubtedly makes for safety.

During the year one hundred thirteen thousand seven hundred seventy-one (113,771) linear feet of main pipe was laid, relaid and relocated, and fifty-four thousand nine hundred forty (54,940) linear feet was abandoned.

The character of the work was as follows: Sixty-three thousand one hundred thirty (63,130) linear feet consisted of extensions in anticipation of street construction, for new buildings, for the general improvement of the system, and for fire and sprinkler service. Among other improvements effected have been the following:

The connection of several mains between Dorchester and Hyde Park.

The fire protection of the Rugby district at Mattapan.

The mains required for the Park square district.

The furnishing of a second high service feed from Columbus avenue into Copley square.

The abolishing of dead-ends in that part of Hyde Park known as "Corriganville."

The establishing of two emergency connections, one with Newton on Washington street, Brighton, and one, the "double high service," with Brookline on Pond street, West Roxbury.

The strengthening of the "double high service" by a main crossing the New York, New Haven & Hartford Railroad at Bellevue station and connecting with the 12-inch pipe in Centre street at Church street, West Roxbury.

The supplying St. Joseph's Cemetery, West Roxbury, and Fairview Cemetery, Hyde Park, with water.

The laying of an auxiliary supply main in Butler street, Orient Heights, to insure a more certain supply for Deer Island, etc.

The relaying was done where the need of better fire protection was most urgent, being scattered throughout the city as follows:

CITY PROPER.

Newbury street, 2,450 feet 6-inch pipe relaid with 12-inch.
Marlborough street, 2,900 feet 6-inch pipe relaid with 12-inch.
Fairfield street, 1,150 feet 6-inch pipe relaid with 10-inch.
Pleasant street, 1,800 feet 12-inch pipe relaid with 12-inch.
Astor street, 900 feet 6-inch pipe relaid with 12-inch.
Haviland street, 500 feet 6-inch pipe relaid with 12-inch.
Batavia street, 1,000 feet 6-inch pipe relaid with 10-inch.
St. Stephen street, 600 feet 6-inch pipe relaid with 10-inch.
Dalton street, 500 feet 8-inch pipe relaid with 12-inch.
Cambria street, 400 feet 6-inch pipe relaid with 12-inch.

ROXBURY.

East Lenox street, 1,100 feet 6-inch pipe relaid with 12-inch.
Yeoman street, 900 feet 6-inch pipe relaid with 12-inch.
Norfolk avenue, 1,250 feet 6-inch pipe relaid with 12-inch.
George street, 1,750 feet 6-inch pipe relaid with 10-inch.
Eustis street, 1,350 feet 6-inch pipe relaid with 10-inch.

SOUTH BOSTON.

Fargo street, 600 feet 12-inch pipe relaid with 16-inch.
B street, 400 feet 12-inch pipe relaid with 16-inch.

BRIGHTON.

Linden street, 100 feet 6-inch pipe relaid with 10-inch.
Ashford street, 1,500 feet 6-inch pipe relaid with 10-inch.

DORCHESTER.

Norfolk street, 2,150 feet 6-inch pipe relaid with 10-inch.
Hecla street, 900 feet 6-inch pipe relaid with 10-inch.
Faulkner street, 550 feet 6-inch pipe relaid with 10-inch.
Ditson street, 500 feet 6-inch pipe relaid with 10-inch.
Drapier street, 1,100 feet 6-inch pipe relaid with 10-inch.
Charles street, 950 feet 8-inch pipe relaid with 12-inch.
Fox street, 450 feet 6-inch pipe relaid with 12-inch.

HYDE PARK.

West River street, 290 feet 8-inch pipe relaid with 12-inch.
Readville street, 1,700 feet 6-inch pipe relaid with 12-inch;
750 feet 12-inch pipe relaid with 12-inch.
River street, 4,500 feet 4-inch, 6-inch and 8-inch pipe relaid
with 16-inch.

In Hyde Park particularly a very great and much needed improvement was made, both in the fire protection and in the general supply, 9,850 linear feet of old and small pipes being relaid with pipes of adequate size, in addition to extensions amounting to 3,560 feet in length.

Five hundred fifty-one public and seven private hydrants were established, and 306 public and three private hydrants were abandoned, the work being done partly in connection with pipe-laying contracts, partly under a separate contract, and partly by day labor. (See Table VII., page 470, for details of hydrants.)

One thousand four hundred ninety-three service pipes were laid and 485 were abandoned. (See Table X., page 472, for details of services.)

The following mains were cleaned by contract during the year with very satisfactory results:

2,242 linear feet 16-inch in Brooks street, East Boston.

842 linear feet 12-inch in Prince street, city proper.

6,677 linear feet 12-inch in Washington street, West Roxbury.

7,449 linear feet 12-inch in River street, Dorchester.

The daily average consumption for the year was 79,390,600 gallons, a decrease of 10,646,900 gallons from the consumption of 1912. The daily average per capita consumption was 108 gallons, a decrease of 17 gallons from the record of 1912, and the lowest rate since 1895. These figures show a notable decrease in the quantity of water used in the city. They mean that 3,886,118,500 less gallons were used during the past year than in 1912, despite the fact that the estimated increase of population has been 14,460. This gratifying result is due to the installation of meters, an unusually mild winter, and to the work of the Waste Prevention force.

Respectfully submitted,

F. A. McINNES,
Division Engineer.

SEWER SERVICE.

The work of the service is carried on under chapter 9, City Ordinances 1910, and chapter 47, Revised Ordinances 1898, and the following statutes:

Chapter 426 — 1897, as amended by 450 — 1899 and 268 — 1903.

Chapter 383 — 1903, as amended by 464 — 1907.

Chapter 550 — 1907.

Chapter 204 — 1908.

Chapter 514 — 1908.

Chapter 348 — 1912.

THE DUTIES OF THE SEWER SERVICE.

1. Preparation of plans for sewerage works.
2. Construction and maintenance of all drainage works.
3. Investigation of complaints in regard to defective drainage.
4. The granting of permits for sewer construction.
5. The preparation of plans for the assessment of the cost of sewer construction.
6. The examination of the plans of other corporations proposing to construct works in public streets with reference to their probable interference with sewerage works.

Total number of employees on pay roll January 31, 1913	532
Total number of employees on pay roll January 31, 1914	516
Total amount of weekly pay roll January 31, 1913	\$9,667 42
Total amount of weekly pay roll January 31, 1914	\$10,205 00
Total amount of monthly pay roll January 31, 1913	\$658 00
Total amount of monthly pay roll January 31, 1914	\$666 33
Total amount of monthly pension roll January 31, 1913:	
Veterans	\$403 52
Laborers	\$247 54

Total amount of monthly pension roll January 31, 1914:	
Veterans	\$513 42
Laborers	\$367 92
Average weekly pay roll, including monthly roll and exclusive of pension roll, for fiscal year,	\$9,951 06
Charged as follows:	
Maintenance	*\$4,391 68
Sewerage works	2,845 92
Separate systems of drainage	2,713 46
Average number of men employed	526
Number of men on pension roll January 31, 1913:	
Veterans	9
Laborers	8
Number of men on pension roll January 31, 1914:	
Veterans	12
Laborers	12
Average number of horses maintained by the service during the year	46
Rate of wages per day to common laborers	†\$2 25
* Includes amount charged to the Sanitary and Street Cleaning Services.....	
Paving Service.....	\$326 61
Abolishment of grade crossings.....	412 75
High Pressure Fire Service.....	2,158 07
Bridge Service.....	508 36
	198 29
	<u>\$3,604 08</u>

† \$2.25 to May 31, \$2.50 from May 31.

Financial Statement from February 1, 1913, to January 31, 1914.

OBJECT.	Balances on Hand Feb. 1, 1913.	Appropriations, Loans and Transfers.	Revenue Received During the Year.	Total Credits.	Expenditures During the Year.	Balances on Hand Jan. 31, 1914.
Sewer Service.....	.....	\$380,000 00	\$7,208 91	\$387,208 91	\$387,120 67	\$88 24
Sewerage works.....	\$193,117 36	600,000 00	.....	793,117 36	536,099 47	257,017 89
Separate systems of drainage.....	119,615 74	400,000 00	.....	519,615 74	455,997 19	63,618 55
Totals.....	\$312,733 10	\$1,380,000 00	\$7,208 91	\$1,699,942 01	\$1,379,217 33	\$320,724 68

NOTE.—Work done in East Boston district on account of grade crossing and charged to that appropriation, \$3,183.51.

MAINTENANCE EXPENDITURES, FEBRUARY 1, 1913, TO
JANUARY 31, 1914.

SEWER SERVICE.

Improved Sewerage.

Pumping station, inside	\$43,433 74	
Pumping station, outside	15,259 82	
Pumping station, engines	22,784 55	
Pumping station, boilers	16,462 34	
		\$97,940 45
Moon Island		17,898 50
Main and intercepting sewers		26,098 29
Office salaries		3,000 00
		\$144,937 24

Stony Brook.

Maintenance	1,593 44
-----------------------	----------

Miscellaneous Maintenance Charges.

Cleaning catch-basins	35,821 47
Yards and lockers	4,561 95
Employed at yards	22,478 59
Horses, carts, harnesses, etc.	\$22,621 98
Teaming	19,079 30

	\$41,701 28	
Less amount earned by service teams	24,560 42	
		17,140 86
Automobiles		8,962 44
Cleaning sewers		36,956 62
Office salaries		13,263 46
Office expenses		3,354 75
Culverts, repairing and maintaining	\$1,837 48	
Repairing department buildings	1,409 96	
Repairing catch-basins, South Boston	1,741 65	
Repairing catch-basins, East Boston	554 18	
Repairing catch-basins, Charlestown	485 71	
Repairing catch-basins, Brighton	950 05	
Repairing catch-basins, West Roxbury	1,327 37	
Repairing catch-basins, Dorchester	3,851 62	
Repairing catch-basins, Hyde Park	47 36	
Repairing catch-basins, Roxbury	4,265 93	
Repairing catch-basins, city proper	3,834 38	
Repairing sewers, South Boston	539 89	
Repairing sewers, East Boston	511 25	
Repairing sewers, Charlestown	243 38	
Repairing sewers, Brighton	634 24	
Repairing sewers, West Roxbury	2,189 10	
Repairing sewers, Dorchester	3,537 42	
Repairing sewers, Roxbury	9,962 86	
Repairing sewers, city proper	5,293 46	
Repairing sewers, Hyde Park	58 76	
		43,276 05
Pension roll (veterans)		5,151 63
Pension roll (laborers)		3,589 68

Carried forward \$341,088 18

<i>Brought forward</i>	\$341,088 18
Fuel and oil	2,139 47
Hardware, tools, etc.	7,124 31
Engines and boilers	66 39
Sundries and miscellaneous charges	10,734 56
Damages, claims and medical attendance	4,576 74
Telephones	835 31
House connections	9,194 10
Rubber goods	1,770 04
Gatehouse, Fenway	150 24
Stock	40,413 37

\$418,092 71

Credit.

Amount earned by service engines	\$340 00
Stock transferred and used on construction	28,531 84
Rubber goods transferred and used on construction	295 95
Fuel and oil transferred and used on construction	1,134 43
Hardware, tools, etc., transferred and used on construction	669 82
	30,972 04
	\$387,120 67

1913.

Charges to Various Parties for Work Done and Material Furnished.

Transit Commission	\$4,492 58
Sanitary Service	631 03
Water Service	507 05
Paving Service	221 89
Street Cleaning and Oiling	217 66
Boston Elevated Railroad	1,046 35
Bridge Service	133 69
Abolishment of Grade Crossing	312 28
R. S. Brine Transportation Company	47 26
Boston Pneumatic Transit Company	74 94
James Doherty	6 00
Cruff & Byrne	5 50
C. J. Donovan	61 00
Metropolitan Sewer and Water Board	6,770 20
United States Trust Company	20 00
R. B. Brigham Hospital Trustees	665 75
Wheeler, McElveen Company	147 25
W. Perry Company	83 50
Boston Athletic Association	67 92
John Hallett	44 00
Roxbury Iron Metal Company	49 00
David Grossman	25 00
E. L. Rhodes, E. O. Howard, Trustees	65 60
Schoolhouse Commission	38 43
Edison Electric Illuminating Company	36 11
Max Palis	427 78
Jersey Creamery Company	144 00
Mr. Bradley	2 00
T. Reardon	5 00
New England Telephone & Telegraph Company	397 88
West Newton Street Garage	108 00
Monahan Estate	20 73

Carried forward \$16,875 38

<i>Brought forward</i>	\$16,875 38
Metropolitan Park Department	13 27
Paine Furniture Company	6 00
	\$16,894 65

Amounts Collected by City Collector and Credited to Appropriation for Sewer Service Maintenance, February 1, 1913, to January 31, 1914.

Boston Transit Commission	\$4,584 23
Boston Elevated Railway Company	712 35
Paine Furniture Company	6 00
United States Trust Company	20 00
Edison Electric Illuminating Company	36 11
Boston Athletic Association	67 92
Boston Pneumatic Service Company	74 94
Cruff & Byrne	5 50
Abolishment of grade crossings	312 28
Public Works Department, Paving Service	155 53
Public Works Department, Sanitary Service	572 00
Public Works Department, Water Service	438 39
Public Works Department, Street Cleaning Service	217 66
J. Doherty	6 00
	\$7,208 91

Appropriation for 1913-14	\$380,000 00
Collections for 1913-14	7,208 91
	\$387,208 91

Sewer and Water Division, Sewer Service.—Maintenance Expenditure, Detail, 1913-1914.

ACCOUNTS.	Total Expendi- ture.	Labor.	Teaming.	Stock.	Contracts.	Miscellaneous.
Automobiles (5).....	\$8,962 44	\$2,418 00	.....	.....	.....	New auto..... \$1,300 00 Gasolene..... 623 25 Storage..... 710 00 Repairs:..... Labor..... 840 12 Fittings, etc..... 3,071 07 \$6,544 44
Cleaning catch-basins.....	35,821 47	7,956 76	\$570 26	.....	\$27,158 09	Car fares..... \$81 98 Advertising..... 4 60 Stock..... 22 03 Salt..... 27 75 136 36
Cleaning sewers.....	36,956 62	12,092 69	4,180 92	.....	12,275 63	Advertising..... \$34 60 Dumping..... 5 45 Machines..... 1,000 00 Rubber goods, etc..... 28 70 Machine cleaning: Machines..... 2,322 26 Labor..... 5,016 37 8,407 38
Culverts, repairing and maintaining. Engines and boilers.....	1,837 48 60 39	1,756 23	81 25	.....	.....	Waste..... \$27 10 Repairs, inspection, etc... 39 29 66 39
Employed at yards. Fuel and oil.....	22,478 59 2,139 47	22,478 59	.....	.....	.....	Coal..... \$1,350 75 Oil and gasolene..... 788 72 2,139 47
Hardware and tools.....	7,124 31	.....	.....	.....	.....	10½ doz. picks..... } 30 doz. pick handles... } \$621 44 46 doz. shovels..... } Hose..... 1,036 85 Canvas..... 779 56 Hardware, repairs, etc... 3,871 67 Large tools..... 814 79 7,124 31
House connections.....	9,194 10	8,400 26	117 10	\$224 71	.....	Car fares..... 452 03

Horses, carts, harnesses, etc.	22,621 98	8,588 37							Fodder..... New horses..... Stable goods..... Veterinary service..... Repairs, wagons, and harnesses..... Shoeing..... Board and miscellaneous,	\$6,261 62 1,582 93 811 85 203 50 3,316 85 972 61 884 25	
Maintenance, Stony brook. Office expenses.	1,593 44 3,354 75	1,185 21	392 19	16 04					Printing..... Stationery..... Miscellaneous.....	\$2,167 58 783 63 403 54	14,033 61
Office salaries.	13,263 46	13,263 46							Weekly..... Monthly.....	\$8,338 47 4,924 99	3,354 75
Repairing department buildings. Repairing catch-basins, South Boston. " " " East Boston. " " " Charlestown. " " " Brighton. " " " West Roxbury. " " " Dorchester. " " " Hyde Park. " " " Roxbury. " " " city proper. Repairing sewers, South Boston. " " " East Boston. " " " Charlestown. " " " Brighton. " " " West Roxbury. " " " Dorchester. " " " Roxbury. " " " city proper. " " " Hyde Park.	1,409 96 1,741 65 551 18 485 71 950 05 1,327 37 3,851 62 47 36 4,265 93 3,834 38 539 89 511 25 243 38 634 24 2,189 10 3,537 42 9,962 86 5,293 46 58 76	30 50 1,175 43 255 14 332 60 302 17 591 54 1,964 21 39 00 3,213 86 1,023 24 63 07 323 83 150 43 324 00 1,523 78 2,454 44 5,742 61 2,847 83 36 80	19 50 188 79 127 62 56 45 191 52 156 65 481 59 6 25 232 64 532 67 127 12 103 43 155 01 333 36 361 97 837 63 797 01 17 63	1,359 96 377 43 171 42 96 66 456 36 579 18 1,405 82 2 11 819 43 2,278 47 83 99 29 92 155 23 331 96 721 01 3,382 62 1,648 62 4 33					(284 pairs boots..... 71 coats..... 72 hats.....)	1,770 04	
Rubber goods.	1,770 04								Rent..... Gas..... Electricity..... Miscellaneous.....	\$1,732 67 146 94 94 52 2,103 07*	835 31 4,077 20
Stock. Teaming. Telephones. Yard and locker.	40,413 37 19,079 30 835 31 4,561 95	598 50 19,079 30 221 78	51 38 262 97	39,763 49							

* Includes hot water system, hydrant and gasoline tank, South End Yard.

Sewer and Water Division, Sewer Service.—Maintenance Expenditure, Detail, 1913-14.—*Concluded.*

Accounts.	Total Expendi- ture.	Labor.	Teaming.	Stock.	Contracts.	Miscellaneous.
Back Bay Fens, gatehouses.....	\$150 24	.....	.....	.....	.....	Electric light..... \$125 69 Car fares..... 11 00 Miscellaneous..... 13 55 \$150 24
Damages, claims and medical attendance....	4,576 74	.....	.....	.....	.....	Accidents, allowance on account of..... \$1,176 74 Annuities..... 600 00 Dredging..... 2,550 00 * Miscellaneous..... 250 00 4,576 74
Miscellaneous, sundries.....	10,734 56	\$5,267 37	\$318 96	\$2,417 73	\$1,975 00 †	Sundries: Repairing streets..... \$97 43 Summer street, pump- ing station..... 115 07 Rain gauges..... 23 45 Dumping..... 34 10 Gypsy moth..... 14 57 Milling..... 4 11 Developing..... 75 Motor cycle..... 3 18 Chloride of lime..... 2 40 Glycerine..... 3 25 Repairs..... 236 07 Car fares..... 221 12 755 50
Pension roll, veterans and laborers.....	8,741 31	8,741 31	.....	.....	.....	.....
	\$297,715 89	\$134,728 94	\$10,700 85	\$56,453 61	\$41,408 72	 \$54,423 77
<i>Less Credits.</i>						
Teams..... \$24,560 42						
Stock..... 28,531 84						
Engines and boilers..... 340 00						
Rubber goods..... 295 95						
Fuel and oil..... 1,134 43						
Hardware and tools..... 669 82						
Totals.....	\$242,183 43	\$115,836 34	\$10,700 85	\$31,893 19	\$41,408 72	 \$42,344 33

* Settlement of claims Boston Wharf Company.

† Dredging Roxbury Canal.

Sewer and Water Division, Sewer Service.—Maintenance Expenditure, Detail, 1913=14.

ACCOUNTS.	Total Expendi- ture.	Labor.	Con- tracts.	Teaming.	Waste.	Coal and Wood.	Oil and Gasoline.	Packing.	Valves.	Car Fares.	Stable.	Pipe Fittings and Miscel- laneous.	Towing.
Pumping station, inside.....	\$43,433 74	\$22,005 23	.....	.....	\$306 22	\$17,738 45	\$129 54	\$66 08	.....	\$23 30	.....	\$3,134 92	
" " outside.....	15,259 82	11,672 33	.....	\$179 28	.....	5 00	.....	.....	.....	13 25	\$875 04	1,189 92	\$1,325 00
" " engines.....	22,784 55	18,311 16	.....	.....	.....	.....	1,027 41	1,457 82	\$1,705 71	.....	.....	282 45	
" " boilers.....	16,462 34	15,247 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,215 14	
Moon Island.....	17,898 50	13,983 38	\$900 00	.....	30 65	582 18	18 34	.....	.....	737 35	526 31	1,120 29	
Office salaries.....	3,000 00	3,000 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Main and intercepting sewers,	26,385 48	17,072 12	4,677 13	653 38	10 54	131 78	67 45	.....	.....	52 60	1,252 51	2,467 97	
<i>Credits.</i>													
	\$145,224 43	\$101,291 42	\$5,577 13	\$832 66	\$347 41	\$18,487 41	\$1,242 74	\$1,523 90	\$1,705 71	\$826 50	\$2,653 86	\$9,410 69	\$1,325 00
Main and intercepting sewers:													
Amount earned by service	287 19	220 90	.....	.....	.....	.....	.....	.....	.....	.....	66 29	.....	
teams.....													
	\$144,937 24	\$101,070 52	\$5,577 13	\$832 66	\$347 41	\$18,487 41	\$1,242 74	\$1,523 90	\$1,705 71	\$826 50	\$2,687 57	\$9,410 69	\$1,325 00

Recapitulation.— Maintenance Detail, 1913-14.

	Improved Sewerage.	Outside Improved Sewerage.	Totals.
Labor.....	\$101,291 42	\$134,728 94	\$236,020 36
Contracts.....	5,577 13	41,408 72	46,985 85
Teaming, hired and city.....	832 66	10,700 85	11,533 51
Waste.....	* 347 41	27 10	374 51
Fuel.....	† 18,487 41	1,350 75	19,838 16
Oil.....	‡ 1,242 74	788 72	2,031 46
Packing.....	\$ 1,523 90		1,523 90
Valves.....	1,705 71		1,705 71
Car fares and traveling expenses.....	826 50	766 13	1,592 63
Horses, etc.....	2,653 86	14,033 61	16,687 47
Towing.....	|| 1,325 00		1,325 00
Pipe fittings and miscellaneous.....	9,410 69		9,410 69
Rent.....		1,732 67	1,732 67
Telephones.....		835 31	835 31
Automobiles, repairs and supplies.....		6,544 44	6,544 44
Stock and miscellaneous supplies.....		84,798 65	84,798 65
	\$145,224 43	\$297,715 89	\$442,940 32
CREDITS.			
<i>Improved Sewerage.</i>			
Labor.....	\$220 90		
Stables.....	66 29		
	287 19		
<i>Outside Improved Sewerage.</i>			
Miscellaneous.....	\$12,079 44		
Labor.....	18,892 60		
Stock.....	24,560 42		
		55,532 46	55,819 65
	\$144,937 24	\$242,183 43	\$387,120 67
* WASTE.			
1,870½ pounds at 10c.....	\$187 02		
728 pounds at 8½c.....	63 70		
600 pounds at 9½c.....	55 50		
300 pounds at 10c. and express,	30 65		
124 pounds at 8½c.....	10 54		
	\$347 41		
† COAL.			
4,340 tons 1,058 pounds soft... \$17,773 45			
87 tons 1,100 pounds hard.. 692 96			
2 cords wood..... 21 00			
	\$18,487 41		
‡ OIL.			
2,090½ gallons engine at..... 18c.			
1,256½ gallons cylinder at..... 28c.			
57 gallons sperm at..... 90c.			
50 gallons lard at..... 90c.			
60 gallons raw at..... 52c.			
3,000 pounds grease at..... 10c.			
810 gallons kerosene at..... 8½ to 12c.			
210 gallons gasolene at..... 17 to 19½c.			
			\$1,523 90
|| TOWING.			
Boston Tow Boat Company... \$1,325 00			\$1,242 74

Coal at Pumping Station.

DATE.	Contractor.	Tons.	PAID IN 1913-14.	
			Per Ton.	Totals.
1913.				
March 12..	D. Doherty & Co.....	1	\$5 00	\$5 00
April 5..	Spring Coal Company (barge "George R. Scofield").....	1,269 ¹¹ ₁₁	3 67	4,660 27
May 28..	J. P. Stewart Coal Company.....	1	4 50	4 50
July 10..	Staples Coal Company (lighter "Marse").....	200	4 65	930 00
Aug. 27..	J. P. Stewart Coal Company.....	1	4 50	4 50
Aug. 22..	James O'Neil <i>et al.</i> , receivers (lighter "Franklin H. Skeele").	178 ¹¹ ₁₁	{ 4 00 * 0.18 }	746 42
July 18..	New England Coal and Coke Company (lighter "Cherry")..	500 ²³ ₁₀	{ 4 00 † 0 20 ‡ 0 27 }	2,235 18
Sept. 4..	New England Coal and Coke Company (barge "Annie")....	1,968 ²⁹ ₁₁	4 18	8,230 08
Sept. 6..	Metropolitan Coal Company (lighter "No. 3").....	220 ²⁵ ₁₀	4 35	957 50
Totals.....		4,340 ¹⁰ ₁₀	.....	\$17,773 45

* Stevedoring.

† Lighterage.

‡ Discharging.

Catch-basins Cleaned by Contract, 1913=14.

District.	Contractor.	Start and Finish of Work.	Price per Basin.	Total Cubic Yards Excavated.	Contractor Received.	Total Basins Cleaned.	Total Basins Freed.	Total Drop Inlets Cleaned.	Average Cubic Yards per Basin.	Inspection.	Per Cent of Cost for Inspection.	Average Cost to City per Basin.	Average Number Basins Cleaned per day.
1. South Boston.....	J. J. Loonie.....	Mar. 24, 1913 Jan. 20, 1914	\$3 50	.....	\$1,703 50	501	3	4	.....	\$357 00	16.80	\$4 23	5.0
2. East Boston.....	J. W. Collins.....	Mar. 3, 1913 Feb. 3, 1914	3 78	.....	956 34	253	.....	.....	.....	272 75	22.20	4 86	4.2
3. Charlestown.....	J. W. Collins.....	Mar. 3, 1913 Jan. 8, 1914	4 00	.....	1,642 00	406	3	12	.....	374 50	18.60	4 97	4.3
4. Brighton.....	J. J. Loonie.....	Feb. 10, 1913 Dec. 31, 1913	3 00	.....	1,217 00	402	.....	11	.....	294 00	19.50	3 76	5.3
5. West Roxbury.....	J. W. Collins.....	Mar. 24, 1913 Sept. 30, 1913	2 89	.....	1,406 53	477	2	24	.....	405 50	22.40	3 80	4.6
6. Dorchester.....	J. W. Collins.....	Feb. 4, 1913 Feb. 3, 1914	2 99	.....	4,817 14	1,586	4	78	.....	1,143 25	19.20	3 75	5.4
7. South of Dover and Berkeley streets.....	J. J. Loonie.....	Feb. 1, 1913 Feb. 1, 1914	3 50	.....	6,489 52	1,819	19	90	.....	1,385 20	17.60	4 33	6.3
8. North of Dover and Berkeley streets.....	J. W. Collins.....	Feb. 3, 1913 Feb. 1, 1914	4 25	.....	6,845 50	1,566	63	64	.....	1,657 82	19.50	5 43	5.4
11. Hyde Park.....	J. W. Collins.....	Feb. 1, 1913 Aug. 28, 1913	3 25	.....	694 25	209	2	11	.....	142 75	17.00	4 00	5.2
Total catch-basins cleaned.....													
Total drop inlets cleaned.....													
Total catch-basins freed.....													
Total cost: Contractors.....													
Inspection.....													
Advertising.....													
Miscellaneous.....													
\$25,831 78													
6,032 77													
4 60													
54 38													
\$31,923 53													

PIPE AND MASONRY SEWERS BUILT BY DAY LABOR, BY DISTRICTS



SEWER CONSTRUCTION.—Continued

‡ Cost not complete.

PIPE AND MASONRY SEWERS BUILT BY CONTRACT, BY DISTRICTS.—*Continued.*

Sewerage Works.

Expenditures, February 1, 1913, to January 31, 1914.

PUBLIC WORKS DEPARTMENT.

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ACCOUNTS.	Labor.	Teaming.	Materials.	Hired and Department. Machinery.	Miscellaneous.	Contracts.	Totals.
Engineers' salaries.....	\$34,274 01						\$34,274 01
Engineers' expense.....	774 71	\$84 56			\$4,492 32		5,351 59
Pumping station.....	1,489 95		\$2,373 64		12 90	\$18,632 39	22,508 88
Sundries.....					65 22	7,975 00	8,040 22
Land-taking and court executions.....					18,534 30		18,534 30
New manholes, entire city.....	2,238 22	531 66	1,305 13		98 26		4,173 27
New catch-basins, South Boston.....	505 01	73 16	469 98		29 48		1,077 63
New catch-basins, East Boston.....	3,526 35	799 50	1,899 83		44 85		6,270 53
New catch-basins, Brighton.....	2,197 74	386 50	1,298 30		19 40		3,901 94
New catch-basins, West Roxbury.....	505 68	103 85	99 63		5 00		714 16
New catch-basins, Dorchester.....	3,256 69	381 74	1,827 42		18 01		5,483 86
New catch-basins, Roxbury.....	606 02	95 81	69 86				771 69
New catch-basins, city proper.....	237 93	51 01	191 43				480 37
Sewers built in entire city.....	104,518 55	7,399 17	31,936 96	\$8,472 96	6,776 11	266,736 95	423,810 70
New catch-basins, Charlestown.....	62 85	31 13	55 95				149 93
New catch-basins, Hyde Park.....	244 83	33 13	248 43				526 39
	\$154,438 54	\$9,971 22	\$41,776 56	\$8,472 96	\$30,095 85	\$293,344 34	\$536,099 47

Sewerage Works.

Expenditures, February 1, 1913, to January 31, 1914.

Location.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Contracts.	Miscel- laneous.	Totals.	Remarks.
SOUTH BOSTON.										
E street, at Anchor street.	Day labor			\$87 75	\$396 84	\$248 40		\$132 17	\$865 16	
Land of the Commonwealth of Massachu- setts, Summer street to Northern avenue, and Northern avenue from D street to 600 feet east.	Day labor	\$527 00	\$15,050 64	1,164 76	7,105 40	2,303 17	\$3,281 91	969 04	30,381 92	
Kemp street, overflow in land of City of Boston, at foot of Kemp street.	Contract	517 00	869 00	1 00	35 89		14,977 73	3 83	* 16,404 45	
Northern avenue, extended from D street to 994 feet west.	Contract	289 00	442 50		71 92		10,665 80	6 12	11,475 34	
H street, from Columbia road to tide water.	Day labor	82 00	299 26	71 78	415 33			1 43	869 80	
L street, from East Ninth street to Columbia road.	Contract	100 00	77 00				915 17		* 1,092 17	
Sleeper street, from Congress street to 630 feet north.	Day labor	556 00	7,737 17	752 09	3,734 20	1,027 00	1,589 90	506 63	15,882 99	8 catch-basins included.
Summer street, opposite E street, under- ground pumping station.	Contract	900 00	875 00	23 19	734 98		6,205 41	73 79	8,812 37	
Summer street, opposite E street, automatic pumping plant.	Contract						3,103 00	146 20	3,249 20	
EAST BOSTON.										
Private land, Bennington and Saratoga streets, and under Saratoga street to Orient Heights Playground.	Day labor	100 00	2,503 79	431 80	1,375 49	596 60		138 51	5,146 19	

Saratoga street, near Ford street, to 200 feet west and extension 120 feet west.	20 00	494 67	97 25	315 34	.....	2 50	929 76
Cottage street, from Prescott street to Neptune road.	60 00	34 13	.....	194 71	.....	.....	4,184 76
Private land, from Faxon street to Saratoga street.	20 00	568 07	9 00	472 55	.....	.....	1,069 62
Frankfort street, from Prescott street to 200 feet southwesterly.	50 00	73 50	.....	11 92	.....	3 90	1,556 22
Geneva street, from Gove street to north-east of Porter street.	98 00	4,196 01	549 01	878 97	.....	21 80	* 6,419 23
Neptune road, from Cottage street to Gosnold street.	45 00	885 07	249 13	357 40	.....	11 40	1,548 00
Porter street, from Orleans street to Cottage street.	15 00	991 74	196 13	249 01	.....	14 90	1,466 78
Porter street outlet to end of street.....	30 00	953 32	52 38	830 67	.....	21 12	1,887 49
Saratoga street, from 225 feet east of Trumbull street to 265 feet easterly.	36 00	1,061 38	235 88	406 54	.....	11 50	1,751 30
BRIGHTON.							
Maple avenue, from Dustin street to Murdock street.	28 00	585 43	69 06	105 80	.....	7 68	795 97
Spring street, from Dustin street to Murdock street.	10 00	399 22	50 38	85 17	.....	1 50	546 27
WEST ROXBURY.							
Alberta street, from Centre street to railroad.	30 00	143 50	.....	55 79	.....	4 20	2,311 69
Lawn street, from Mt. Hope street to 200 feet northeasterly.	12 00	662 19	83 00	97 15	.....	15 55	869 89
Padfey street, from Brown avenue to railroad, and Grandview street, from Beech street 170 feet southwesterly.	34 00	56 00	.....	50 24	.....	4 30	620 58

* Cost not complete.

Sewerage Works.—Continued.

LOCATION.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Contracts.	Miscel- laneous.	Totals.	Remarks.
Preston road, from Pleasant street to Chapin avenue.	Contract.....	\$20 00	\$40 25	.....	\$44 00	.....	\$599 31	\$4 30	\$707 86	
Vale street, from La Grange street to 275 feet southwest, and Walker street, between Weld street and old sewer 76 feet north.	Contract.....	25 00	161 00	.....	51 29	.....	1,229 67	4 20	1,471 16	
DORCHESTER.										
Dorchester intercepting sewer in Auckland street, from Freeport Street brook to Hoyt street.	Day labor....	242 00	8,880 18	\$647 68	2,376 94	\$1,093 20	327 91	485 41	14,053 32	
Adams street, Dakota road, Homes avenue and Lawrence park.	Contract.....	.....	.....	.....	.....	.....	557 46	.....	557 46	
Davenport brook, Hallet street to 112 feet north of Marsh street extended.	Contract.....	296 00	510 00	.....	46 46	.....	5,699 74	257 16	* 6,809 36	
Preston and Freeport streets.....	Contract.....	118 00	91 00	.....	187 43	.....	4,032 42	96 09	4,524 94	
Tenean street, from existing sewer to 1,000 feet south.	Contract.....	.....	.....	.....	.....	.....	263 46	.....	263 46	
Bailey street, from Washington street to 184 feet east.	Day labor....	.....	.....	.....	8 88	.....	.....	.....	8 88	
Mattapan brook, in private land between New York, New Haven & Hartford Railroad and Norfolk street.	Day labor....	.....	.....	.....	209 40	.....	.....	.....	209 40	
Helena road, from Burgoyne street to Adams street.	Contract.....	15 00	87 50	.....	55 28	.....	679 72	3 80	841 28	
Adams street, from Leedsville street to 229 feet northerly.	Contract.....	10 00	21 00	.....	75	.....	538 78	4 00	574 53	

Bow th in street, from Hamilton street to Olney street; Bowdoin street, from Corona street to Westville street; Bourne side street, southeast corner of Park street.	<i>Roadway.</i>	Contract.....	585 00	556 50	514 13	5,687 52	4 80	* 7,347 95	12 catch-basins included.
Tremont street, east of Stony brook conduit; Sussex street, northwest corner of Hamilton street; Magazine street, north side, 10 feet west of Gerard street; Howard, Gerard, and Magazine streets.									
Vesta road, from Harvard street to Blue Hill avenue.									
Harvard street, from Standish street to New York, New Haven & Hartford Railroad.									
Springdale street, east and west corners of Playstead road; Savin Hill avenue, west corner of Playstead road; Draper street, north corner of Bentham road.		Contract.....	50 00	35 00	1 63	372 37	796 41	1 10	1,256 51
Quincefield street, west side, 160 feet north of Wendover street; Wendover street, northwest corner of Quincefield street.									10 catch-basins.†
Mitdell street, northwest and southeast sides, 125 feet from Old Colony avenue.									
Dawes street, east and west sides, 75 feet north of Willis street.									
Crossman street, from Norfolk street to West Selden street.		Contract.....	163 00	143 50	241 23	1,762 49	4 00	2,314 22	4 catch-basins included.
Downer avenue, from existing sewer to Sawyer avenue.		Contract.....	70 00	80 50	49 21	742 64	4 00	946 35	
Dorchester avenue, from Roach street to 500 feet south, and Roach street, from Dorchester avenue to Pleasant street.		Contract.....	287 00	115 50	197 89	4,191 48	207 75	4,999 62	1 catch-basin included.
Dorchester avenue, from Brook street to Codman street.		Contract.....	69 00	49 00	36 86	664 65	4 30	823 81	
Dorchester avenue, from Roach street to Savin Hill avenue.		Contract.....	326 00	262 50		2,774 57	67 75	* 3,430 82	
Davenport brook, private land, from Burt street to Washington street.		Contract.....	523 00	140 00				* 663 00	

† See Vesta road, etc., separate system of drainage.

* Cost not complete.

Sewerage Works.—Continued.

Location.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Contracts.	Miscel- laneous.	Totals.	Remarks.
Everdenn street, from Freeport street to Blanche street.	Day labor....	\$10 00	\$1,917 93	.....	.....	.....	.....	.....	* \$1,927 93	
Harrison park and Bench street, from Har- rison park to 250 feet northeast.	Contract.....	65 00	38 50	.....	\$54 54	.....	\$699 84	\$4 30	862 18	
Hallett-Davis street and outlet in Marsh street extended.	Contract.....	133 00	42 00	.....	110 08	.....	1,278 95	4 20	1,568 23	
Neponset Playground, from railroad to Neponset avenue.	Contract.....	824 00	400 00	.....	493 92	.....	22,567 95	4 00	24,289 87	
Norfolk street, from railroad to Walk Hill street.	Contract.....	85 00	94 50	\$3 25	174 64	.....	4,637 75	4 10	4,999 24	2 catch-basins included.
Sawyer avenue, from 180 feet south of Cush- ing avenue to Cushing avenue.	Day labor....	10 00	654 67	63 06	108 61	.....	.....	.....	836 34	
Train street, from Ashmont street to South Munroe terrace.	Contract.....	40 00	91 00	.....	40 29	.....	841 35	3 90	1,016 54	
Tesla street, from River street to Edgewater drive; Burnah street, from Edgewater drive to 330 feet northwest; Edgewater drive, from Malta street to Burnah street; Wood avenue, from 1,475 feet south of Parker street to Tina avenue; River street, from Mattakeesit street to Monponset street; Baldwin street, from River street to 200 feet northwest; Blake street, from 370 feet north of River street to 543 feet north.†	Contract.....	530 00	518 00	.....	275 00	.....	9,336 50	4 50	10,664 00	†
Cameron street, from Hancock street to Downer avenue.	Day labor....	80 00	2,070 45	103 45	444 83	.....	.....	2 35	2,701 08	
Mattapan brook and Delpui street.	Contract.....	696 00	160 00	.....	.....	.....	.....	3 50	* \$59 50	

Standard street, from River street to 932 feet north.	Contract.....	185 00	105 00	.....	120 01	.....	2,941 55	4 20	3,355 76
ROXBURY.									
Southampton street, from Massachusetts avenue to 430 feet east of New York, New Haven & Hartford Railroad.	Day labor.....	.....	.....	.....	.....	.....	.....	158 60	158 60
Calmet street, from Hillside street to Parker Hill avenue.	Contract.....	26 00	49 00	.....	335 70	.....	1,198 25	4 30	1,613 25
Harrison avenue, from Taber street to 295 feet south.	Day labor.....	119 00	1,202 95	111 57	263 41	\$107 46	.....	29 31	1,833 70
CITY PROPER.									
East Concord street, from Roxbury canal to Albany street.	Day Labor.....	.....	.....	.....	71 78	.....	.....	613 96	685 74
Fulton street, from Richmond street to Lewis street.	Day Labor.....	.....	.....	.....	115 03	.....	.....	1 67	116 70
Harrison avenue, from Beach street to Essex street.	Day labor.....	.....	.....	.....	.....	.....	.....	21 80	21 80
Nashua street, from Causeway street to Minot street.	Day labor.....	.....	.....	.....	14 00	.....	.....	358 65	372 65
<i>South End Improvement, Section 1.</i>									
Union Park street and Union park, from Albany street to Tremont park.	Contract.....	1,394 00	1,151 00	4 50	410 07	.....	59,524 49	681 19	63,165 25
<i>South End Improvement, Section 2.</i>									
Clarendon street, from Tremont street to Columbus avenue; Buckingham street, from Columbus avenue to 75 feet north; Warren avenue, from alley west of Berkeley street to alley west of Clarendon street; Chandler street, from alley east of Clarendon street to 284 feet west of Clarendon street; West Canton street, from alley north of Tremont street to alley north of Columbus avenue; Dartmouth street, from Montgomery street to alley north of Tremont street; Montgomery street, from Union park to Dartmouth street; Union park, from Tremont street to Montgomery street.	Contract.....	1,436 00	2,002 50	13 32	35 00	.....	41,555 95	79 30	* 45,122 07
									3 catch-basins built, 9 catch-basins re-built, included.

* Cost not complete.

† See Hyde Park.

Sewerage Works.—Continued.

LOCATION.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Contracts.	Miscel- laneous.	Totals.	Remarks.
<i>South End Sewer Improvement, Section 3.</i>										
Dartmouth street, from Tremont street to alley north of Tremont street; alley north of Tremont street, from Dartmouth street to West Newton street; alley north of Tremont street, from West Newton street to alley east of Massachusetts avenue.	Day labor....	\$920 00	\$19,850 28	\$1,637 65	\$3,615 83	\$883 93	.....	\$816 97	*\$27,724 66	
<i>South End Sewer Improvement, Section 4.</i>										
Private land, east of Albany street.....	Contract.....	635 00	435 00	.....	1,783 00	.....	.....	8 60	* 2,861 60	
<i>South End Sewer Improvement, Section 5.</i>										
Union Park street and Albany street.....	Contract.....	1,050 00	137 62	29 25	.....	.....	.....	450 62	* 1,667 49	
East Newton street.....	Day labor....	150 00	1,738 22	334 34	567 78	213 20	.....	199 16	3,202 70	
Howard street, from Somerset street to Bulfinch street.	Day labor....	3 00	1,476 54	319 13	391 51	.....	.....	52 11	2,322 29	
HYDE PARK.										
A, Fulton, Margin streets and Eastern ave- nue.	Contract.....	.....	.....	.....	.....	.....	\$342 60	.....	342 60	
Hyde Park avenue, from Mother brook to Factory street.	Contract.....	504 00	402 50	3 50	.....	.....	2,880 32	4 20	* 3,794 52	8 catch-basins included.

Parker street, from Wood avenue to Oakwood street.	Contract.	77 00	57 75	13 83	594 03	4 00	746 61	
<i>Purchased Area.</i>								
Blanchard street, from Parkway to private land; Buckingham street, from Readville street to Regent street; Chesterfield street, from Readville street to Regent street; Damrell avenue, from Nelson street to Stark avenue; Eliot avenue, from Stoughton avenue to Milton street; Knight street, from Mother brook to Readville street; Manila avenue, from Norton street to Vaughan street; Milton street, from Readville street to Dedham line; Nelson street, from Vaughan street to Stoughton avenue; Norton street, from River street to Readville street; Neponset River Parkway and private land, from Readville street to Norton street; Readville street, from Damon street to 450 feet north of Knight street; River street, from Neponset River Parkway to Dedham line; Stark avenue, from Stoughton avenue to Milton street; Stoughton avenue, from Stark avenue to Eliot street; Stoughton avenue, from Readville street to Stark avenue; Sunnyside avenue, from River street to Dedham line; Vaughan street, from Manila avenue to Nelson street; Vaughan street, from Nelson street to Readville street.	Contract.	1,850 00	2,151 37	3 25	35,141 64	5 69	* 39,154 95	
Warren avenue, from Neponset river to Beacon street; Beacon street, from Warren avenue to 25 feet north of Water street, opposite Williams avenue; Station street, from 40 feet northeast to Fairmount avenue; private land, at Neponset avenue near Fairmount avenue.	Contract.	133 00	90 75		1,983 36		* 2,207 11	8 catch-basins included.

* Cost not complete.

Sewerage Works.—Concluded.

LOCATION.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Contracts.	Miscel- laneous.	Totals.	Remarks.
Baldwin street, from River street 200 feet northwest. Blake street, from 370 feet north of River street to 543 feet north. River street, from Mattakeset street to Monponset street. Wood avenue, from 1475 feet south of Parker street to Tina avenue.	Contract.	\$72 00	\$84 00	.....	\$124 69	.....	\$1,553 55	\$4 20	\$1,838 44	2 catch-basins included.
Water street, from existing sewer to 110 feet easterly; Highland street, from existing sewer to Metropolitan avenue; Metropol- itan avenue, from Highland street to 150 feet southeast; Bridge street, from Water street to New York, New Haven & Hart- ford Railroad; Summit street, from Mil- ton avenue to 210 feet east.	.....	\$17,465 00	\$87,053 55	\$7,399 17	\$31,936 96	\$6,472 96	\$266,870 73	\$6,776 11	\$423,974 48	
Totals.....	.....	.....	.....	.....	.....	.....	133 78	.....	† 133 78	
<i>Credit.</i> Transfers to separate systems of drainage..	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		\$17,465 00	\$87,053 55	\$7,399 17	\$31,936 96	\$6,472 96	\$266,736 95	\$6,776 11	\$423,840 70	

† See Dorchester, Tesla street, etc.

† C-B. Dorchester, South Boston and Roxbury.

Sewerage Works Loan, 1913-14.

Engineers' salaries, general	\$34,274 01
Amount charged to construction of sewers	17,465 00
	\$51,739 01

ENGINEERS' EXPENSE.

Labor	\$774 71
Teaming	84 56
Car fares, etc.	1,008 92
Photos	679 60
Rubber goods	35 99
Motoreycle	300 00
Rent	18 00
Supplies, repair on instruments, and miscellaneous	2,449 81
	\$5,351 59

PUMPING STATION CONSTRUCTION.

Contracts Pumping Station Calf Pasture.

E. F. Kennelly, waterproofing	\$625 72	
Lumsden & Van Stone Company, steam drum	450 00	
Power Equipment Company, turbine pumping engine	6,000 15	
Coffin Valve Company, hydraulic press, ...	950 00	
Gibby Company, pipe supports	86 00	
Gibby Company, cast-iron screens	600 00	
Lumsden & Van Stone Company, piping, ...	1,767 18	
W. H. Gallison Company, piping	794 07	
Power Equipment Company, connecting force main	910 00	
Lumsden & Van Stone Company, piping, ...	650 00	
Smith Erecting & Contracting Company, steel floors	879 00	
W. A. Snow Iron Works, flooring	1,969 11	
E. Van Norden Company	2,359 00	
W. H. Gallison Company, piping	592 16	
		\$18,632 39
Labor		1,489 95
Studies		368 80
Borings		69 50
Machinery		1,160 67
Materials		774 67
Advertising		12 90
		\$22,508 88

SUNDRIES.

B. F. Sturtevant Company, extending drain on Readville street, Hyde Park	\$56 92
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Moon Island.

Coffin Valve Company:		
Ten new sluice gates	\$7,125 00	
Advertising	4 30	
	7,129 30	
McKenzie & Temple:		
New shaft house	\$850 00	
Advertising	4 00	
	854 00	
		\$8,040 22

Abolishment of Grade Crossings.

*Saratoga and other streets, East Boston, begun April 24, 1913;
finished November 6, 1913.*

WORK DONE BY DAY LABOR.

Engineering	\$94 20
Labor	2,063 87
Teaming	256 25
Material	863 24
Miscellaneous	218 23
	\$3,495 79

Built, 1913:

Butler avenue, from Bayswater street to Faxon street, 139.62 linear feet 18-inch pipe surface, 2 manholes	6.3-foot cut
210.66 linear feet 15-inch pipe surface	5.5-foot cut
Saratoga street, from Butler avenue easterly, 210.30 linear feet 15-inch pipe surface, 1 man- hole	7.5-foot cut
Breed street, from Ford street to Bennington street, 210 linear feet 10-inch pipe surface, 1 manhole	8.5-foot cut
Thurston street, from Butler avenue easterly, 143.90 linear feet 12-inch pipe surface, 1 man- hole	6.5-foot cut

Court Executions and Awards on Account of Land-takings, Etc.

Roman Catholic Archbishop of Boston, Leyden street, court execution	\$124 96
Reuben Whitten, Glendon street, court execution	3,384 79
Boston Elevated Railway Company, Stony brook, Street Commissioners award	31 50
Lawrence Norton, Stony brook, Street Commissioners award	75 00
M. M. Wilson, Mt. Bowdoin terrace, Street Commissioners award	33 80
C. M. Hayden and J. W. Dutton, Albany and Union Park streets, Street Commissioners award	13,125 00
E. S. Grew <i>et al.</i> , Beaver street, Hyde Park, court execution	61 25
W. J. Jordan, Clifford street, Street Commissioners award	150 00
H. I. Bornstein, Ballou avenue, Street Commissioners award	80 00
E. R. Bolster, Norfolk street, Street Commissioners award	75 00
C. V. Lynch, Norfolk street, Street Commissioners award	40 00
C. E. Pinkham, Vermont street, Street Commissioners award	103 00
Jacob Koob, Walworth street, Street Commissioners award	250 00
Jacon Seaver <i>et al.</i> , Morton street, court execution	1,000 00
	<u>\$18,534 30</u>

New catch-basins, Brighton.....	Contract.....	.....	.....	\$132 93	\$38 00	\$170 93	Appian way.....	2
New catch-basins, Brighton.....	Day labor.....	.....	\$301 43	.....	294 59	596 02	Armington street.....	3
New catch-basins, Brighton.....	Day labor.....	.....	1,473 40	.....	999 78	2,473 18	Harvard avenue.....	9
New catch-basins, Brighton.....	Day labor.....	.....	123 35	.....	110 96	234 31	Islington street.....	2
New catch-basins, Brighton.....	Day labor.....	.....	278 56	.....	148 94	427 50	Myrick street.....	2
New catch-basins, West Roxbury.....	Day labor.....	\$2 20	\$2,176 74	\$132 93	\$1,592 27	\$3,901 94	.....	18
New catch-basins, West Roxbury.....	Day labor.....	.....	.....	.....	.....	\$2 20	Lamartine street.....	1
New catch-basins, West Roxbury.....	Day labor.....	.....	\$82 60	.....	\$100 00	182 60	Metropolitan avenue.....	1
New catch-basins, West Roxbury.....	Day labor.....	.....	150 13	.....	121 10	271 23	Germania avenue.....	1
New catch-basins, West Roxbury.....	Day labor.....	.....	172 95	.....	85 18	258 13	.....	3
New catch-basins, Dorchester.....	Day labor.....	\$2 20	\$405 68	.....	\$306 28	\$714 16	.....	1
New catch-basins, Dorchester.....	Day labor.....	\$11 73	.....	.....	.....	\$11 73	Neponset avenue.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	\$78 85	.....	\$102 97	181 82	Lithgow street.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	66 88	.....	65 57	132 45	Dorchester avenue, No. 2049,.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	90 00	.....	73 19	163 19	Willowwood street.....	2
New catch-basins, Dorchester.....	Day labor.....	.....	30 90	.....	45 46	76 36	Armadine street.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	241 98	.....	166 71	408 69	Bird street.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	141 13	.....	90 94	232 07	Geneva avenue.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	58 70	.....	48 34	107 04	Blue Hill avenue.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	68 75	.....	57 85	126 60	Hancock street.....	1
New catch-basins, Dorchester.....	Day labor.....	.....	141 40	.....	99 96	241 36	.....	1

* Cost not complete.

†129.25 linear feet 24-inch pipe surface drain and 53.50 linear feet 10-inch pipe surface drain built and included in cost of basins.

Sewerage Works Loan.—Concluded.

New Catch-basins Paid for, February 1, 1913, to January 31, 1914. (Contract and Day Labor.)

District.	Built by	BUILT IN 1912.			BUILT IN 1913.			Total Expenditure.	Location.	Number Catch-basins Built.	Number Catch-basins Rebuilt.
		Built in 1912.		Materials, etc.	Labor.	Contractor.	Material and Teaming.				
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	\$189 35	.....	\$78 65	\$208 00	Walnut street.	1	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	199 60	.....	171 73	371 33	Dorchester avenue and Valley road.	2	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	71 50	.....	69 27	140 77	Don street.	1	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	88 00	.....	121 10	209 10	Pope's Hill street.	2	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	56 20	.....	95 86	152 06	Westville street.	1	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	676 45	.....	187 67	864 12	Potosi street.	2	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	111 20	.....	48 43	159 63	Bowdoin street.	1	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	111 85	.....	96 27	208 12	River street.	1	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	104 95	.....	81 50	186 45	Claremont street.	1	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	159 30	.....	211 52	370 82	Gayland street.	2	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	475 50	.....	193 13	668 63	Colonial avenue.	4	
New catch-basins, Dorchester.	Day labor.	.....	.....	.....	94 20	.....	36 77	130 97	Milton avenue.	1	
New catch-basins, Dorchester.	Contract.	.....	.....	.....	.....	.....	72 55	* 72 55	Normandy street.	2	
		\$11 73	\$3,256 69	.....	.....	.....	\$2,215 44	\$5,483 86		30	1

New catch-basins, Hyde Park.....	Day labor.....	\$86 63	.....	\$93 85	\$180 48	Hyde Park avenue, No. 1931,	1
New catch-basins, Hyde Park.....	Day labor.....	79 45	.....	107 51	186 96	Hyde Park avenue, near Dana avenue.	1
New catch-basins, Hyde Park.....	Day labor.....	78 75	.....	80 20	158 95	Warren avenue.....	1
New catch-basins, Roxbury.....	Day labor.....	\$244 83	.....	\$281 56	\$526 39		3
New catch-basins, Roxbury.....	Day labor.....	\$60 68	.....	\$84 09	\$144 77	Thorndike street.....	1
New catch-basins, Roxbury.....	Day labor.....	284 75	.....	81 58	* 366 33	Columbus avenue.....	1
New catch-basins, Roxbury.....	Day labor.....	260 59	.....	.....	* 260 59	Winslow street and Eustis street.	3
New catch-basins, city proper.....	Day labor.....	\$606 02	.....	\$165 67	\$771 69		5
New catch-basins, city proper.....	Day labor.....	\$87 43	.....	\$74 11	\$161 54	Bay State road.....	1
New catch-basins, city proper.....	Day labor.....	24 30	.....	40 63	64 93	680 Albany street.....	1
New catch-basins, city proper.....	Day labor.....	72 60	.....	71 45	144 05	Lovering place.....	1
New catch-basins, city proper.....	Day labor.....	53 60	.....	56 25	109 85	883 Washington street.....	1
		\$237 93	.....	\$242 44	\$480 37		2
		\$11,022 10	\$132 93	\$8,186 81	\$19,376 50		4
Grand total.....		\$34 66					101

* Cost not complete.

New Catch-basins Paid for, February 1, 1913, to January 31, 1914. (Included in Other Sewer Construction.)

DISTRIC.	Built by	BUILT IN 1913.				Total Expenditures.	Location.	Number of Catch-basins Built.	Number of Catch-basins Rebuilt.
		Contractor.	Materials.	Labor.	Material and Teaming.				
New catch-basins, East Boston.....	Day labor.....	.....	.....	\$50 00	\$60 77	\$110 77	Saratoga street.....	1	
New catch-basins, South Boston.....	Day labor.....	.....	.....	342 50	752 89	1,095 39	Sleeper street.....	8	
New catch-basins, Dorchester.....	Contract.....	\$159 00	\$71 31	.....	.....	230 31	Winter street.....	1	
							Howes street.....	1	
							Bowdoin street.....	2	
							Bournside street.....	1	
New catch-basins, Dorchester.....	Contract.....	242 00	149 08	.....	.....	391 08	Crossman street.....	4	
	Contract.....	69 00	32 77	.....	.....	101 77	Dorchester avenue.....	1	
	Contract.....	105 60	61 20	.....	.....	166 80	Norfolk street.....	2	
	Contract.....	560 00	634 15	.....	.....	1,194 15	Springdale street.....	2	
New catch-basins, Hyde Park.....							Savin Hill avenue.....	1	
							Draper street.....	1	
							Quincefield street.....	1	
							Wendover street.....	1	
							Mitchell street.....	2	
							Daves street.....	2	
	Contract.....	631 20	.....	.....	.....	* 631 20	Hyde Park avenue.....	8	
	Contract.....	712 50	.....	.....	.....	* 712 50	Warren avenue.....	3	
New catch-basins, Hyde Park.....							Beacon street.....	2	
							Water street.....	1	
							Station street.....	1	
							Neponset avenue.....	1	

New catch-basins, Hyde Park.....	Contract.....	110 50	56 54	.....	167 04	Bridge street.....	2
New catch-basins, Roxbury.....	Contract.....	1,198 25	415 00	.....	1,613 25	Calumet street.....	10
New catch-basins, Roxbury.....	Contract.....	710 60	313 93	.....	1,024 53	Tremont street.....	3
						Sussex street.....	1
						Magazine street.....	1
						Howard street.....	4
New catch-basins, city proper.....	Contract.....	296 50	73 98	.....	370 48	South End sewer improve- ment, Section 1.....	4
New catch-basins, city proper.....	Contract.....	786 00	.....	.....	* 786 00	South End sewer improve- ment, Section 2.....	3
		\$5,581 15	\$1,807 96	\$392 50	\$813 66		75
					\$8,595 27		9

* Cost not complete.

101 catch-basins built	Amount Paid.
4 catch-basins rebuilt	\$19,376 50
75 catch-basins built	
9 catch-basins rebuilt	8,595 27
included in other sewer construction.....	
189	\$27,971 77

Sewerage Works—New Manholes.

LOCATION.	Built by	Number.	Labor.	Teaming.	Contracts.	Material.	Totals.	Begun.	Finished.
Beacon street, at Dartmouth street.	Day labor.	1	\$22 96	\$12 00	.....	\$28 78	\$63 74	1913 Jan. 1	1913 Jan. 2
East Dedham street, between Harrison avenue and Albany street.	Day labor.	1	32 20	5 38	.....	53 27	90 85	Feb. 17	Feb. 25
Kilby street, at Water street.	Day labor.	1	53 70	31 12	.....	41 52	126 34	Mar. 12	Mar. 15
East Sixth street, near K street.	Day labor.	1	51 67	11 25	.....	35 36	98 28	April 7	April 12
Alley No. 447, off Exeter street.	Day labor.	1	49 08	21 75	.....	40 80	111 63	April 8	April 16
Devonshire street, at Summer street.	Day labor.	1	85 75	6 00	.....	43 87	135 62	Mar. 31	April 8
B street, at Bolton street.	Day labor.	1	69 33	6 00	.....	41 54	116 87	April 14	April 22
West Third street, between C and D streets. .	Day labor.	1	33 92	19 50	.....	32 87	86 29	April 14	April 18
Mavorick street, at Cottage street.	Day labor.	1	52 80	13 50	.....	39 67	105 97	April 25	April 30
Silver street, at No. 44.	Day labor.	1	61 50	13 00	.....	44 84	119 34	April 30	May 6
Dresser street, at F street, and near Dorchester street.	Day labor.	2	93 64	14 38	.....	65 69	173 71	April 29	May 5
Alley, between St. Stephen street and Hunting- ton avenue.	Day labor.	1	23 35	9 75	.....	27 07	60 17	June 14	June 15
Chestnut avenue, No. 32.	Day labor.	1	80 55	13 00	.....	44 42	137 97	June 27	July 3
Terrace street, No. 84.	Day labor.	1	72 75	26 00	.....	48 67	147 42	July 5	July 14
East Canton street, from Washington street to Harrison avenue.	Day labor.	1	54 00	19 50	.....	42 24	115 74	July 23	July 29
Murdock street, at North Beacon street.	Day labor.	1	81 19	17 06	.....	36 82	135 07	July 8	July 15
Waverly street, at Market street.	Day labor.	1	88 45	6 94	.....	44 77	140 16	July 11	July 16

Decatur street, at Bunker Hill street.....	1	42 40	10 00	.....	13 25	65 65	July 28	July 31
Parker street, No. 526.....	1	32 45	13 00	.....	14 10	59 55	July 31	Aug. 6
Dorchester avenue, near Hyde street.....	1	40 00	16 50	.....	21 21	77 71	July 17	July 22
Walker street, between Main and Hyde streets,	1	31 20	10 13	.....	45 53	86 86	Sept. 15	Sept. 18
Blue Hill avenue, at Glenway street.....	1	103 70	15 56	.....	29 16	148 42	Sept. 19	Oct. 4
Sixth street, between E and D streets.....	1	.....	.....	\$50 00	12 83	62 83	Aug. 19	Aug. 23
G street, No. 150.....	1	108 43	30 91	.....	77 50	216 84	Aug. 30	Sept. 6
Porter street, 207 feet southeast of Jess street..	1	68 47	6 50	.....	2 80	77 77	Oct. 3	Oct. 9
Metropolitan avenue, at Washington street...	1	154 81	39 50	.....	49 83	244 14	Sept. 26	Oct. 4
Cross and Fulton streets.....	1	376 54	38 87	.....	73 70	489 11	Nov. 17	Nov. 28
Prince street, between Hanover and Garden- court streets.	1	69 83	19 00	.....	42 04	130 87	Nov. 17	Nov. 20
Dillaway street, between Hollis street and Dix place.	1	44 35	15 75	.....	29 85	89 95	Nov. 19	Nov. 27
Winslow street, near Eustis street.....	1	93 35	10 56	.....	.....	* 103 91	Dec. 26	1914 Jan. 3
Totals.....	.....	\$2,172 37	\$472 41	\$50 00	\$1,124 00	\$3,818 78	.....	.....
Paid in 1913 — manholes built in 1912.....	.....	65 85	59 25	.....	229 39	354 49	.....	.....
Totals.....	.....	\$2,238 22	\$531 66	\$50 00	\$1,353 39	\$4,173 27	.....	.....

* Cost not complete.

Separate Systems of Drainage.

Expenditures, February 1, 1913, to January 31, 1914.

ACCOUNTS.	Labor.	Teaming.	Materials.	Hired and Department Machinery.	Miscellaneous.	Contracts.	Totals.
Engineers' salaries.....	\$41,167 06						\$41,167 06
Engineers' expense.....	754 69	\$154 52			\$1,310 75		2,219 96
Sundries.....	51 00	55 25	\$315 47		478 28		900 00
Land-takings and court executions.....					1,004 38		1,004 38
New manholes (entire city).....	309 48	78 75	215 05				603 28
New catch-basins, West Roxbury.....	3,899 90	711 88	1,597 57		17 40		6,226 75
New catch-basins, Brighton.....	182 06	47 25	195 22		70		425 23
New catch-basins, Dorchester.....	947 80	211 55	859 01		5 43		2,023 79
New catch-basins, city proper.....	354 28	63 76	221 88				639 92
Sewers built in entire city.....	94,710 35	10,983 75	29,945 67	\$2,834 08	16,609 50	\$245,703 47	400,786 82
	\$142,376 62	\$12,306 71	\$33,349 87	\$2,834 08	\$19,426 44	\$245,703 47	\$455,997 19

Separate Systems of Drainage.

Sewers and Service Drains Built by the City February 1, 1913, to January 31, 1914.

LOCATION.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Miscel- laneous.	Contracts.	Totals.	Remarks.
BRIGHTON.										
Hano and Cambridge streets.....	Day labor.....	.....	.....	\$12 00	\$90 54	.....	\$7 93	.....	\$110 47	
North Harvard street, from Hopedale street to Hooker street.	Day labor.....	.....	.....	16 10	17 43	.....	.....	.....	33 53	
Kilsyth road, from Lanark road to Selkirk road.	Contract.....	.....	\$3 50	.....	.....	.....	.....	\$1,782 67	1,786 17	
Washington street, from Market street to Cambridge street.	Contract.....	.....	14 00	.....	144 68	.....	55 95	894 45	1,109 08	
Commonwealth avenue, from Chiswick road to Wallingford road.	Contract.....	\$63 00	105 00	.....	28 91	.....	4 40	865 56	1,066 87	
Brainerd road, from Harvard avenue to Warren street, and Redford street, from Commonwealth avenue to Brainerd road.	Contract.....	180 00	571 75	3 00	709 76	.....	4 50	7,220 20	8,689 21	20 catch-basins included.
Commonwealth avenue, from Thorndike road to St. Lukes road, and St. Lukes road, from Commonwealth avenue to Brighton avenue.	Contract.....	135 00	394 00	.....	.....	.....	22 15	2,471 16	3,022 31	2 catch-basins included.
Oakland street, from Faneuil street to Washington street.	Contract.....	140 00	340 00	13 25	422 47	.....	97 05	9,951 32	10,964 09	6 catch-basins included.
Reservoir road, from Beacon street to Boston & Albany Railroad.	Contract.....	37 00	122 50	.....	.....	.....	27 85	753 30	940 65	

Separate Systems of Drainage.—Continued.

LOCATION.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Miscel- laneous.	Contracts.	Totals.	Remarks.
WEST ROXBURY.										
Call street, Hall street and Boynton street,	Day labor....	.....	.....	.....	.....	.....	\$63 67	.....	\$63 67	
Church street, from Centre street to Halford road.	Contract. ....	.....	.....	.....	.....	.....	.....	\$650 95	* 650 95	
South and Centre streets.	Contract. ....	.....	.....	.....	\$655 24	.....	30 21	5,176 93	5,862 38	
Dent street brook, Baker street and private land.	Day labor....	\$12 00	\$1,137 87	\$207 75	98 50	.....	17 70	.....	1,473 82	
Poplar street, from Sycamore street to Hil- burn street.	Day labor....	20 00	2,184 51	361 24	1,420 94	\$217 50	187 66	.....	4,391 85	5 catch-basins included.
West Roxbury low level sewer, in Washing- ton street, etc.	Contract.	2,000 00	2,164 00	3 00	329 50	.....	105 01	42,264 80	46,866 31	
Stony brook, Section 6.	Contract.	47 00	.....	.....	.....	.....	.....	.....	* 47 00	
Stony brook, Section 7.	Contract.	237 00	.....	.....	.....	.....	116 05	.....	* 353 05	
Stony brook, Section 8.	Contract.	1,205 00	1,041 28	124 38	329 11	.....	11,767 49	29,348 26	* 43,815 52	
Anawan avenue, West Roxbury Parkway, Martin and Stratford streets, between New York, New Haven & Hartford Rail- road and a point in Stratford street 220 feet east of Pelton street, West Roxbury.	Contract.	1,324 00	1,280 05	42 50	31 93	.....	89 25	28,259 64	* 31,027 37	1 catch-basin included.
Centre street, from Spring street to Cass street.	Contract.	236 00	308 00	3 25	.....	.....	47 50	3,831 05	* 4,476 70	

Cliffondale street, from Kittridge street to Norfolk street.	Contract.	10 00	46 50	.....	234 88	.....	34 66	812 11	1,138 15	{ 6 catch-basins included.
Dent street brook.	Day labor. ....	.....	583 41	.....	.....	.....	.....	.....	.....	.....
Private land, from Vermont street to 30 feet south of Roberts avenue.	Contract.	69 00	87 50	95 38	1,094 96	.....	26 94	.....	* 2,823 10	.....
Forest Hills square, Hyde Park avenue and Asticon road to St. Ann street.	Day labor.	35 00	1,887 12	197 90	379 61	.....	103 03	.....	2,602 66	.....
WEST ROXBURY.										
Fresno street, from Alder street to 227 feet northeast.	Day labor.	80 00	2,900 59	359 23	545 73	26 00	33 78	.....	* 3,945 33	.....
Montclair avenue.	Contract.	220 00	332 50	1 50	440 95	.....	12 12	7,283 99	8,291 06	8 catch-basins included.
Montebello road, from Brookside avenue to Washington street.	Contract.	30 00	42 00	.....	.....	.....	4 00	897 39	* 973 39	7 catch-basins included.
Parental Home, brook.	Day labor.	30 00	1,921 06	225 80	1,529 52	.....	52 91	.....	* 4,258 71	.....
Spring street to Charles river.	Contract. ....	.....	.....	.....	.....	.....	.....	499 42	.....	.....
Poplar street, from Hilburn street to 300 feet southeasterly.	Contract.	67 00	178 50	3 25	.....	.....	4 00	775 62	* 1,028 37	.....
Sheffield road, from Water street to Selwyn street.	Contract.	20 00	52 50	.....	106 02	.....	4 00	458 34	640 86	.....
South street, from St. Joseph street to Arborway, and Spalding street, from railroad to South street.	Contract.	184 00	409 50	3 13	541 31	.....	419 20	6,963 08	8,520 22	2 catch-basins included.
Spring street, from Charles river to Baker street; Baker street, from Spring street to Gardner street, and Gardner street, from Baker street to Haldun street.	Contract.	1,950 00	1,698 50	12 75	9 56	.....	72 76	36,128 56	* 39,872 13	23 catch-basins, 1 rebuilt included.
Spring street brook, in private land, from Summer street to 115 feet east of Alaric street.	Day labor.	31 00	3,363 67	185 25	.....	.....	.....	.....	* 3,579 92	.....

* Cost not complete.

Separate Systems of Drainage.—Continued.

LOCATION.	Built by	Engineer- ing.	Labor	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Miscel- laneous.	Contracts.	Totals.	Remarks.
Sycamore street, from Hawthorne street to Poplar street, and Poplar street, from Sycamore street to 465 feet north.	Day labor....	\$42 00	\$2,819 04	\$441 26	\$831 46	\$9 50	\$65 86	.....	\$4,209 12	1 catch-basin included.
Walworth street, from Brook street to Belgrade avenue.	Contract, ...	60 00	165 00	6 50	308 18	.....	17 95	\$3,280 60	3,838 23	6 catch-basins included.
Williams street, from Washington street to Call street; Washington street, from Stony brook to Williams street.	Contract, ...	170 00	558 50	.....	4 25	.....	4 00	9,043 96	* 9,780 71	4 catch-basins included.
DORCHESTER.										
Blue Hill avenue, Harvard street, private land and Barrymore street.	Contract, ...	30 00	.....	.....	370 14	.....	58 25	912 66	* 1,371 05	
Browning avenue, from Bernard street to 300 feet west.	Day labor....	.....	.....	.....	9 00	.....	.....	.....	9 00	
Washington street, Grove Hall to Codman square.	Contract, .....	.....	.....	.....	.....	.....	.....	859 21	859 21	
Jones avenue and outlet, ...	Contract, .....	.....	.....	.....	.....	.....	32 18	.....	32 18	
Blue Hill avenue, from Hansborough street to Morton street.	Day labor....	58 00	1,712 87	700 49	1,820 64	198 50	109 01	.....	* 4,599 51	6 catch-basins included.
Catch-basins (Dorchester, South Boston and Roxbury).†	Contract, .....	.....	.....	.....	.....	.....	.....	1,853 91	1,853 91	
Wentworth street, from Norfolk street to Dunbar avenue.	Contract, .....	.....	.....	.....	.....	.....	.....	195 69	195 69	

Blue Hill avenue, from Hansborough street to Greenock street.	Day labor.....	48 00	1,099 52	48 76	605 48	.....	.....	* 1,801 74
Norfolk street, from Corbet street to Washington street, and outlet for Norfolk street in private land, etc.	Contract.....	218 00	157 50	.....	873 45	.....	141 52	5,456 38 9 catch-basins included.
Ballou avenue; Willowwood street to Woodrow avenue, and outlet.	Contract.....	772 00	213 50	.....	.....	.....	4 00	* 7,146 10 10 catch-basins included.
Don street, from Callender street to Woodrow avenue.	Contract.....	28 00	28 00	.....	30 84	.....	4 10	458 21
Greenock street, from Blue Hill avenue to Harvard street.	Day labor.....	152 00	1,716 24	121 69	251 62	.....	30 99	2,272 54
Vesta road, from Harvard street to Blue Hill avenue, and Harvard street from Standish street to New York, New Haven & Hartford Railroad.	Contract.....	160 00	108 50	.....	70 24	.....	14 21	2,931 11 †
Wellington Hill street, from Morton street to Blue Hill avenue, and outlet in Morton and Gilmer streets.	Contract.....	880 00	469 00	.....	755 20	.....	4 10	* 8,520 21 15 catch-basins included.
Whitfield street, from Talbot avenue to Park street.	Day labor.....	30 00	1,377 07	116 84	341 81	.....	10 44	1,876 16 1 catch-basin included.
Wildwood street, from Middleton street to Morton street.	Contract.....	81 00	70 00	.....	75 85	.....	4 20	3,076 55
Roxbury.								
Benton street, from Tremont street to Columbus avenue.	Day labor.....	.....	.....	.....	97 20	\$62 93	4 60	164 73
Cabot street, from Marble street to Newbern street.	Contract.....	.....	.....	.....	.....	.....	270 38	270 38
Edge Hill street, from Gay Head street to 80 feet westerly.	Day labor.....	.....	.....	.....	15 60	.....	7 01	22 61

* Cost not complete.

† See Sewerage Works.

Separate Systems of Drainage.—Concluded.

LOCATION.	Built by	Engineer- ing.	Labor.	Teaming.	Materials.	Hired and Depart- ment Ma- chinery.	Miscel- laneous.	Contracts.	Totals.	Remarks.
Hammond street, from Tremont street to Shawmut avenue.	Contract. ....	.....	.....	.....	.....	.....	\$33 93	.....	\$33 93	
Marbury terrace, from Amory street to Stony brook.	Contract. ....	.....	.....	.....	.....	.....	.....	\$69 36	69 36	
Sachem street, from Hillside street to Wait street.	Day labor. ....	.....	.....	.....	\$49 36	.....	68	.....	50 04	
Sterling street, from Tremont street to Washington street.	Contract. ....	.....	.....	.....	.....	.....	1 26	.....	1 26	
Van Ness street, from Jersey street to Ipswich street.	Day labor.	\$187 00	\$4,799 52	\$1,456 23	3,338 40	\$717 36	548 07	.....	11,046 58	
Oak Grove terrace, from Ruggles street to Auburn place.	Contract.	90 00	89 25	.....	32 04	.....	23 05	1,459 77	1,694 11	
Private land, from Washington street to Fenner street, and Fenner street, Card- ington street, etc.	Day labor.	973 00	13,175 12	1,379 77	3,228 32	470 34	281 87	.....	* 19,508 42	
Tremont and Whittier streets.....	Day labor.	300 00	2,362 49	206 38	.....	.....	4 75	.....	* 2,873 62	
Seaver street, from Humboldt avenue to 232 feet northwest.	Contract.	44 00	80 50	.....	67 15	.....	18 37	1,735 02	1,945 04	
Sarsfield street, from Tremont street to Columbus avenue.	Day labor.	102 00	1,507 24	231 57	352 60	200 06	67 27	.....	2,460 74	
CITY PROPER.										
Dartmouth street.....	Day labor. ....	.....	.....	.....	.....	.....	140 03	.....	140 03	
Fruit street, from North Grove street to 70 feet west.	Day labor.	10 00	.....	246 10	438 22	126 75	72 81	.....	893 88	

Otis place.....	Day labor.....	.....	.....	3 00	92 22	.....	6 92	.....	102 14
Van Rensselaer place.....	Day labor.....	.....	.....	.....	.....	.....	250 00	.....	250 00
Arlington street extension.....	Day labor.....	.....	.....	.....	26 50	.....	.....	.....	26 50
St. James avenue and Providence street.....	Contract.....	.....	.....	.....	81 97	.....	191 17	300 00	573 14
Chestnut street, between River and Lime streets.....	Day labor.....	200 00	2,521 72	517 32	609 88	191 67	343 55	.....	4,384 14
Berkeley street, from Boylston street to Columbus avenue.....	Day labor.....	298 00	9,057 40	1,700 50	2,437 45	291 00	109 08	.....	* 13,893 43
Mt. Vernon street, from Charles street to River street, and River street, from Mt. Vernon street to Alley No. 301; Alley No. 301, from River street to Mt. Vernon square.....	Day labor.....	126 00	2,044 21	153 13	.....	.....	.....	.....	* 2,323 34
Munson street, from Beacon street to Boston & Albany Railroad.....	Contract.....	72 00	70 00	.....	.....	.....	.....	.....	* 142 00
Pleasant street, from Washington street to Eliot street.....	Contract.....	1,600 00	924 61	7 44	472 50	.....	8 80	13,521 13	* 16,534 48
Huntington avenue, from Bryant street to Gainsborough street.....	Day labor.....	78 00	2,033 91	262 70	449 40	.....	38 81	.....	2,862 82
Lime street, from River street to Brimmer street.....	Contract.....	50 00	105 00	.....	49 67	.....	8 10	1,841 20	2,053 97
North Anderson street, from Parkman street to Fruit street.....	Day labor.....	71 00	1,449 91	325 26	560 68	76 67	28 77	.....	2,512 29
North Grove street, from Fruit street to Parkman street.....	Day labor.....	80 00	1,530 86	289 51	404 08	83 60	41 13	.....	2,429 18
Parkman street, from North Grove street to North Anderson street.....	Day labor.....	174 00	3,748 06	898 64	1,632 74	162 20	196 51	.....	6,812 15
Grand total.....	.....	\$15,546 00	\$79,164 35	\$10,983 75	\$29,945 67	\$2,894 08	\$16,609 50	\$245,703 47	\$400,786 82

* Cost not complete.

† See Sewerage Works.

Separate Systems of Drainage, 1913-14.

Engineers' salaries, general	\$41,167 06
Amount charged to construction of sewers	15,509 00
	<u>\$56,676 06</u>

ENGINEERS' EXPENSES.

Labor	\$754 69
Teaming	154 52
Car fares	828 38
Photos	152 90
Supplies and stationery	99 47
Rent	230 00
	<u>\$2,219 96</u>

SUNDRIES.

City of Newton, right of drainage	\$450 00
Labor	51 00
Teaming	55 25
Material	315 47
Paving and Water Services	19 78
Advertising	8 50
	<u>\$900 00</u>

COURT EXECUTIONS AND AWARDS ON ACCOUNT OF LAND-TAKINGS, ETC.

Ellen F. Root, Stony brook, Section 7, court execution	<u>\$1,004 38</u>
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SEPARATE SYSTEMS OF DRAINAGE.
New Catch-basins Paid for, February 1, 1913, to January 31, 1914. (Contract and Day Labor.)

DISTRICTS.	Built by	BUILT IN 1912.		BUILT IN 1913.			Total Expenditure.	Locations.	Number Catch-basins Built.
		Materials, etc.		DAY LABOR.		Material and Teaming.			
				Labor.					
New catch-basins, Brighton.....	Day labor.....	\$69 32		\$182 06		\$173 85	\$69 32	Naples road.....	2
New catch-basins, Brighton.....	Day labor.....	\$69 32		\$182 06		\$173 85	355 91		2
New catch-basins, West Roxbury.....	Day labor.....	\$96 89					\$425 23		
New catch-basins, West Roxbury.....	Day labor.....			\$458 52		\$243 37	\$96 89	Hadwin way.....	2
New catch-basins, West Roxbury.....	Day labor.....			476 52		465 14	701 89	Lamartine street.....	4
New catch-basins, West Roxbury.....	Day labor.....			896 24		736 99	941 66	Tynsdale street.....	10
New catch-basins, West Roxbury.....	Day labor.....			373 68		114 66	1,633 23	Centre street.....	2
New catch-basins, West Roxbury.....	Day labor.....			169 82		42 25	488 34	South street.....	2
New catch-basins, West Roxbury.....	Day labor.....			216 21		116 34	212 07	4295 Washington street.....	1
New catch-basins, West Roxbury.....	Day labor.....			129 81		134 83	332 55	Florence street.....	1
New catch-basins, West Roxbury.....	Day labor.....			497 03		213 67	264 64	Catherine street.....	2
New catch-basins, West Roxbury.....	Day labor.....			251 96			* 251 96	Bellevue street.....	2
New catch-basins, West Roxbury.....	Day labor.....			430 11		162 71	592 82	March avenue.....	2
		\$96 89		\$3,809 90		\$2,229 96	\$6,226 75		26
New catch-basins, Dorchester.....	Day labor.....			\$674 90		\$527 05	\$1,201 95	Woolson street.....	6
New catch-basins, Dorchester.....	Day labor.....			272 90		548 94	821 84	Harvard street.....	4
				\$947 80		\$1,075 99	\$2,023 79		10
New catch-basins, city proper.....	Day labor.....	\$58 75					\$58 75		
New catch-basins, city proper.....	Day labor.....			\$60 70		\$81 83	142 53	Ipswich street.....	1
New catch-basins, city proper.....	Day labor.....			293 58		145 06	438 64	Mountford street †.....	1
		\$58 75		\$354 28		\$226 89	\$639 92		2
Totals.....		\$224 96		\$5,384 04		\$3,706 69	\$9,315 69		40

* Cost not complete.

† 95.90 linear feet 10-inch pipe surface drain built and included in cost of basin.

New Catch-basins Paid for, February 1, 1913, to January 31, 1914. (Included in Other Sewer Construction.)

DISTRICTS.	Built by	CONTRACTS.		DAY LABOR.		Total Expenditure.	Location.	Number Catch-basins Built.	Number Catch-basins Rebuilt.
		Contractor.	Materials.	Labor.	Material and Teaming.				
New catch-basins, Brighton.....	Contract.....	\$1,141 20	\$652 07	.....	.....	\$1,793 27	Brainerd road.....	20	
New catch-basins, Brighton.....	Contract.....	119 00	.....	.....	.....	119 00	Commonwealth avenue and St. Lukes road *.....	2	
New catch-basins, Brighton.....	Contract.....	608 00	119 28	.....	.....	727 28	Oakland street.....	6	
New catch-basins, West Roxbury.....	Day labor.....	.....	.....	\$517 77	\$343 38	801 15	Poplar street.....	5	
New catch-basins, West Roxbury.....	Contract.....	79 20	.....	.....	.....	79 20	Anawan avenue *.....	1	
New catch-basins, West Roxbury.....	Contract.....	303 60	208 62	.....	.....	512 22	Clifftondale street.....	6	
New catch-basins, West Roxbury.....	Contract.....	510 00	264 66	.....	.....	774 66	Montclair avenue.....	8	
New catch-basins, West Roxbury.....	Contract.....	428 50	.....	.....	.....	428 50	Montebello road *.....	7	
New catch-basins, West Roxbury.....	Contract.....	157 00	79 04	.....	.....	236 04	Sheffield road.....	3	
New catch-basins, West Roxbury.....	Contract.....	1,207 00	.....	.....	.....	1,207 00	Spring street *.....	23	1
New catch-basins, West Roxbury.....	Day labor.....	.....	.....	94 70	79 53	174 23	Sycamore street.....	1	
New catch-basins, West Roxbury.....	Contract.....	135 50	97 56	.....	.....	233 06	South street.....	2	
New catch-basins, West Roxbury.....	Contract.....	321 30	205 62	.....	.....	526 92	Walworth street.....	6	
New catch-basins, West Roxbury.....	Contract.....	253 00	.....	.....	.....	253 00	Williams street *.....	4	
New catch-basins, Dorchester.....	Day labor.....	.....	.....	650 00	550 00	1,200 00	Blue Hill avenue, Hansboro street to Morton street.	6	

New catch-basins, Dorchester.....	Contract.....	657 50	321 64	.....	979 14	Norfolk street.....	9
New catch-basins, Dorchester.....	Day labor.....	.....	.....	250 00	400 00	Blue Hill avenue, Hansboro street to Greenock street.	2
New catch-basins, Dorchester.....	Contract.....	526 05	.....	.....	526 05	Ballou avenue*.....	10
New catch-basins, Dorchester.....	Day labor.....	.....	.....	20 10	56 19	Greenock street.....	1
New catch-basins, Dorchester.....	Contract.....	1,119 00	.....	.....	1,119 00	Wellington Hill street.....	* 15
New catch-basins, Dorchester.....	Day labor.....	.....	.....	44 65	66 41	Whitfield street.....	1
New catch-basins, city proper.....	Contract.....	1,674 00	.....	.....	1,674 00	Pleasant street *.....	22
New catch-basins, city proper.....	Day labor.....	.....	.....	55 00	45 00	Mt. Vernon street.....	1
		\$9,239 85	\$1,948 49	\$1,632 22	\$1,290 51		161
					\$14,111 07		1

* Cost not complete.

Recapitulation.

40 catch-basins built.....	Amount Paid.
161 catch-basins built.....	\$9,315 69
1 catch-basin rebuilt } Included in other sewer construction.....	14,111 07
202	<u>\$23,426 76</u>

Separate Systems of Drainage.— New Manholes.

LOCATION.	Built by	Number.	Labor.	Teaming.	Material.	Totals.	Begun.	Finished.
Marlborough street.....	Day labor....	5	\$204 35	\$34 13	\$170 52	\$409 00	May 8	May 17
Newbury street.....	Day labor....	3	105 13	44 62	44 53	194 28	May 22	May 26
Totals.....	.....	8	\$309 48	\$78 75	\$215 05	\$603 28	.....	.....

Catch-basins Built, 1913-1914.

DISTRICT.	Contract.	Day Labor.	REBUILT.	
			Contract.	Day Labor
City proper.....	29	5	.....	11
Roxbury.....	19	5	.....	1
Dorchester.....	56	50	.....	.....
West Roxbury.....	60	35	1	.....
Brighton.....	30	18	.....	.....
Charlestown.....	.....	1	.....	.....
East Boston.....	.....	32	.....	.....
South Boston.....	.....	16	.....	1
Hyde Park.....	18	3	.....	.....
Totals.....	212	165	1	13

Total catch-basins built, 391.

ENTRANCE FEES, PERMITS AND ASSESSMENTS.

Entrance fees to the amount of \$4,854.24 have been deposited with the City Collector for collection from estates upon which no sewer assessment was ever paid, in accordance with the Ordinances of 1910, chapter 9, section 10.

Bills for sewer assessments amounting to \$1,597.78 have been deposited for collection, representing those estates assessed under chapter 456 of the Acts of 1889, and other acts, which have been connected during the year with the sewers for which they were assessed.

Three thousand five hundred and seventy-one permits have been issued, viz., 581 to district foremen, 233 to contractors and 2,757 to licensed drain layers for repairing or laying house drains. The work done under these permits has been inspected and a record of the same made on the plans of the Sewer Service, in accordance with the Ordinances of 1910, chapter 9.

Plans for the assessment of estates for sewer construction have been furnished the Street Commissioners, representing 34,782 feet of sewers and appurtenances, costing \$211,247.09.

RATES PAID FOR HIRED MACHINERY.

Bull wheel derrick and engine	\$85.00 per month
Carson trench machine, complete	\$170.00 per month
Carson trench machine, without engine	\$120.00 per month
Electric motor	\$1.00 per month per horse power
Cable and engine, complete	\$170.00 per month
Hoisting engine	\$75.00 per month
Boiler	\$75.00 per month
Buckets, Carson machine	\$1.40 per month each
Buckets, large iron	\$2.50 per month each
Pumping engine or motor and pump, complete	\$75.00 per month

Cost of Maintaining all Horses in the Sewer Service, February 1, 1913, to January 31, 1914.

ITEMS.	Total Cost.	46 Horses, Average Cost per Day.
Labor.....	\$12,950 92	\$0 771
Hay and grain.....	7,585 57	452
Shoeing.....	1,832 50	109
Veterinary services, medicine and clipping.....	212 05	012
Stable goods.....	469 31	027
	\$23,050 35	\$1 371

Summary of Sewer Construction for the Year Ending January 31, 1914.

DISTRICT.	Built by the City by Contract or Day Labor.	Built by Private Parties.	Total Length Built.
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>
City proper.....	16,287.71	7,756.12	24,043.83
East Boston.....	3,492.63	.....	3,492.63
Charlestown.....	.....	.....	.....
South Boston.....	4,086.97	771.87	4,858.84
Roxbury.....	4,856.30	258.96	5,115.26
West Roxbury.....	33,483.10	7,625.40	41,108.50
Dorchester.....	30,021.69	2,194.28	32,215.97
Brighton.....	7,536.17	440.20	7,976.37
Hyde Park.....	19,933.03	423.99	20,357.02
Totals.....	119,697.60	19,470.82	139,168.42

Summary of Sewer Construction for Five Years Previous to February 1, 1914.

	1909.	1910.	1911.	1912.	1913.
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>
Built by the city by contract or day labor.....	101,073.47	114,731.10	73,974.21	97,884.05	119,697.60
Built by private parties.....	11,606.97	17,051.62	9,622.46	18,106.61	19,470.82
Totals.....	112,680.44	131,782.72	83,596.67	115,990.66	139,168.42

Schedule of Sewers Built to February 1, 1914, in the City of Boston.

DISTRICT.	Length of Sewers Built During the Year Ending January 31, 1914.	Length of Sewers Re-built or Abandoned During the Year Ending January 31, 1914.	Additional Length of Sewers for the Year Ending January 31, 1914.	
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Miles.</i>
City proper.....	24,043.83	8,842.85	15,200.98	2.88
East Boston.....	3,492.63	300.00	3,192.63	0.60
Charlestown.....				
South Boston.....	4,858.84	658.00	4,200.84	0.80
Roxbury.....	5,115.26	1,361.25	3,754.01	0.71
West Roxbury.....	41,108.50	680.00	40,428.50	7.66
Dorchester.....	32,215.97	1,393.01	30,822.96	5.84
Brighton.....	7,976.37		7,976.37	1.51
Hyde Park.....	20,357.02	265.00	20,092.02	3.81
Totals.....	139,168.42	13,500.11	125,668.31	23.81
Total length built previous to January 31, 1913.....				818.78
Length of common sewers.....				842.59
Length of Metropolitan intercepting sewers.....				6.81
Length of intercepting sewers.....				24.12
Total.....				873.52
Total mileage of streets containing sewerage works.....				540.50

Table of Approximate Quantities, Lifts and Duties at Calf Pasture Pumping Station, 1913-1914.

MONTH.	Total Pumpage. Gallons.	Average per Day. Gallons.	Minimum Day. Gallons.	Maximum Day. Gallons.	Average Lift. Feet.	Average Duty, Foot-Pounds, per 100 Pounds of Coal.
1913.						
February.....	2,597,813,000	92,779,000	75,168,000	143,517,000	39.6	96,100,000
March.....	3,520,043,000	113,550,000	87,119,000	171,698,000	39.7	96,600,000
April.....	3,363,447,000	112,114,000	82,161,000	177,575,000	39.7	98,200,000
May.....	2,852,476,000	92,015,000	72,645,000	134,161,000	39.6	105,300,000
June.....	2,493,724,000	83,124,000	64,885,000	106,156,000	39.5	95,400,000
July.....	2,452,288,000	79,106,000	66,820,000	105,921,000	39.4	93,700,000
August.....	2,756,849,000	88,931,000	65,973,000	122,731,000	39.5	91,000,000
September.....	2,725,198,000	90,840,000	72,579,000	142,184,000	39.5	88,300,000
October.....	3,609,356,000	116,431,000	80,137,000	137,689,000	39.6	87,300,000
November.....	2,629,567,000	87,652,000	69,727,000	149,018,000	39.6	79,500,000
December.....	2,878,006,000	92,839,000	71,868,000	140,301,000	39.6	89,700,000
1914.						
January.....	3,161,876,000	101,996,000	76,465,000	163,594,000	39.5	88,800,000
Total.....	35,040,643,000					
Averages.....		95,948,000	73,796,000	141,212,000	39.6	* 92,309,000

* Average from yearly quantities.
Records from plunger displacement.

CALF PASTURE PUMPING STATION.

This plant contains the following sewage pumping units:

One vertical beam and fly-wheel triple expansion engine of the Leavitt type; cylinders, $18\frac{1}{2}$ inches, 33 inches, $52\frac{3}{4}$ inches in diameter; two single acting pump plungers, each 60 inches in diameter and 120-inch stroke; capacity, 72,000,000 gallons in twenty-four hours with 40-foot lift.

Two vertical beam and fly-wheel compound engines of the Leavitt type; cylinders, $25\frac{1}{2}$ inches, 52 inches in diameter; two single acting pump plungers, each 48 inches in diameter and 108-inch stroke; capacity of each engine, 35,000,000 gallons in twenty-four hours with 40-foot lift.

Two steam driven turbine centrifugal pumps of the De Laval type with a capacity of 56,000,000 gallons each in twenty-four hours with 40-foot head.

The principal alterations and repairs are as follows:

Gate House.—A new steam and hydraulic sewage press was installed, resulting in a saving of 300 pounds of coal a day.

Main Building.—The second steam turbine centrifugal pump was installed, both units are now undergoing tests; the cast-iron floor for the turbines and the new roof over them was completed. The slate roof and the windows were repaired. The salt water injection pumps, dynamos, and motor on pipe cutting machine were overhauled and repaired.

Boiler Room.—Nos. 1, 2 and 4 boilers were repaired and Nos. 1 and 2 retubed; meters were installed on Nos. 1 and 3 boilers. The closed heater, previously condemned, was repaired, repiped and erected by the station force, piping used being some stored on the plant.

Deposit Sewers.—A new scraper chain was placed in the north sewer; a 10 horse power motor to run the scraper chains was set up in place of the old boiler; the 12-inch iron pipe which conveys sludge from the deposit sewers to the sludge tank was condemned, taken out and will be replaced at once.

In General.—The sea wall at end of deposit sewer was pointed, a new hydrant located in the yard near the wharf, the main road graded and fence painted.

Summer Street Station.—New piping and a gauge for the tell-tale were installed and the station painted.

Quite extensive repairs are necessary on the main building. The stonework in eaves and turrets needs pointing so badly that rain water finds its way into the brick backing and thence into the interior of the station; new copper gutters and flashing is also needed and extensive patching of the slate roofing.

MOON ISLAND.

The concrete bottoms of Basins Nos. 2, 3 and 4 need repairs, and the salt water pipes in all basins need renewal.

The I-beams supporting the floor in the long gate-house are in bad condition, and should be replaced and the floor rebuilt of concrete. The same is true of the floor in the head house.

The gates in Basins Nos. 1 and 2 are now in good condition. Nine of the new gates are now being installed and the remaining eleven will be as soon as possible.

Both gates to the turbine pit should be renewed and the gates at the outlet repaired.

The fencing of the roadway is being renewed with neat concrete posts and wooden rails, all by department force.

The east shaft should be entirely cleared of all iron beams and guides and masses of grease as a measure of safety, lest some of the ironwork should become detached and drop into the tunnel and obstruct it.

COST OF PUMPING.

Average cost per million foot-gallons for pumping:

Volume (35,040.64 million gallons) by (= times) lift (39.6 feet) = 1,387,609 million foot-gallons for the year.

Labor cost included in the totals is based upon the following force of forty-eight men:

One superintendent, one clerk, one storekeeper, one electrician, one carpenter, one blacksmith, two machinists, four laborers, and four "engineers' watches," each including nine men.

Cost of city water not included.

ITEMS.	Cost.	Cost per Million Foot- Gallons.
Labor.....	\$49,815 17	\$0 03590
Coal.....	22,128 03	01595
Oil and waste.....	1,405 07	00101
Rubber valves and packing.....	4,345 94	00313
Miscellaneous supplies and renewals.....	4,480 95	00323
Totals.....	\$82,175 16	\$0 05922
Labor at screens.....	.....	\$0 00294

MAIN DRAINAGE.

The work of the main drainage district consists of the repairing and cleaning of all tide gates, sumps, regulators and overflows connected with the metropolitan sewer in Brighton, Charlestown, Dorchester and East Boston.

The repairing and cleaning of all tide gates, sumps, regulators and overflows connected with the main sewer, east side, west side, South Boston, Stony brook, Dorchester and Roxbury interceptors.

These gates, sumps, regulators and overflows must be inspected and cleaned after each storm or heavy rise of sewage.

The masonry repairs in all gatehouses and all sewer

manholes of the entire main drainage system comes under the care of this district.

The care of the Stony brook district, consisting of the care and cleaning of the old channel from the premises of the Boston Belting Company to the outlet at the Charles river, with the care of all connecting overflows and flushing gates.

The cleaning and care of Stony brook channel, from Williams street, Forest Hills, to the Charles river, with the care of all connecting gates and overflows.

The care of two gatehouses located in the Back Bay Fens and the maintenance in proper condition of gates, machinery and electric switch boards.

SIPHONS.

The twin siphons on the top sewer under Muddy river, between Roxbury and Brookline, and four siphons on the improved sewer, and the connection of the Roslindale top sewer with the metropolitan sewer also comes under the care of this district.

Number of Tide Gates, Sumps, Regulators and Overflows to be Cared for in Each District.

	Gates.	Sumps.	Regulators.	Overflows.
Brighton.....	42	17	15	23
Charlestown.....	24	11	9	12
East Boston.....	47	19	18	26
City proper.....	92	41	15	42
Dorchester.....	64	11	2	18
South Boston.....	50	25	4	21
Roxbury.....	42	11	.....	20
Penstock and flushing gates.....	19			

ACCOUNT OF WORK PERFORMED DURING YEAR ENDING JANUARY 31, 1914.

Tide gates inspected and cleaned	4,947
Sumps inspected and cleaned	2,424
Regulators inspected and cleaned	1,202
Overflows inspected and cleaned	1,767
Tide gates repaired	139
Sumps repaired	22
Regulators repaired	13
Overflows repaired	8
Manholes repaired	191
Manhole steps put in	80
Tide gates replaced with new ones	4
New tide gates put in	4
Penstock and flushing gates cleaned, oiled and repaired,	89

Amount of Refuse Removed from Gatehouse from February 1, 1913, to January 31, 1914, Inclusive.

MONTHS.	Pounds.
1913.	
February.....	71,162
March.....	64,753
April.....	61,659
May.....	65,637
June.....	65,858
July.....	71,604
August.....	70,720
September.....	63,427
October.....	64,311
November.....	67,847
December.....	63,648
1914.	
January.....	60,775
	791,401=395 $\frac{1401}{2000}$ tons

Coal used in crematory 1= $\frac{1362}{2240}$ tons.

NOTE.—February 14, 1913, began to operate the new steam and hydraulic press, burning the compressed refuse under the boilers, resulting in a saving of 300 pounds of coal daily at the crematory and gaining the fuel value of the compressed refuse.

Amount of Sludge Received and Removed from Deposit Sewers from February 1, 1913, to January 31, 1914, Inclusive.

MONTH.	Cubic Yards Received.	Cubic Yards Removed.	
1913.			
February.....	603	595	Sludge in sewers February 1, 1913, 2,556 cubic yards.
March.....	602	595	
April.....	149	85	
May.....	489	425	
June.....	489	425	
July.....	404	340	
August.....	574	510	
September.....	574	510	
October.....	234	170	
November.....	236	170	
December.....	85	* 2,265	
1914.			
January.....	442		Sludge in sewers February 1, 1914, 1,347 cubic yards.
Totals.....	4,881	6,090	

* Sludge scoured out of sewers.

WATER SERVICE.

FINANCIAL STATEMENT.

Total receipts from all sources	\$3,031,600 36
Income credited to City Loan on account to pay Hyde Park Water debt	17,000 00
Net income	\$3,014,600 36
Total expenditures for all purposes	2,948,361 41
Excess receipts over expenditures	\$66,238 95
Balance at beginning of year	274,580 54
Balance at end of year	<u>\$340,819 49</u>

TOTAL RECEIPTS FOR THE YEAR FROM ALL SOURCES.

Sales of water	\$2,947,210 88
Service fire elevator and motor pipes and repairs, labor, etc., ...	63,052 63
Sales of merchandise	7,970 75
Fees for summonses	5,013 94
Sales of old material	3,615 55
Shutting off and letting on water	2,085 45
Sales of horses	824 63
Use of West Roxbury pumping station	770 05
Board of horses	612 00
Interest on deposits	248 25
Rent of conduit, Congress street	100 00
Reimbursement for destruction of horse	50 00
Repayment of overcharge, gypsy moth assessment	46 23
	<u>\$3,031,600 36</u>

EXPENDITURES.

Current expenses and extensions	\$899,338 91
Service mains and relaying mains	86,945 40
Metropolitan water assessment	1,842,127 65
Interest	118,673 48
Refunded water rates	1,275 97
	<u>\$2,948,361 41</u>

Details of expenditures under the appropriation for current expenses for the fiscal year ending January 31, 1914. (From revenue.)

F. A. McInnes, division engineer, ...	\$5,000 00	
Less six months paid by Sewer Service	<u>2,500 00</u>	\$2,500 00
Superintendent		<u>3,000 00</u>
Carried forward		\$5,500 00

<i>Brought forward</i>	\$5,500	00
Clerks, messengers and assistants	49,735	87
Foremen	27,792	26
Mechanics	88,611	79
Inspectors	71,189	29
Laborers, etc.	212,898	13
Inspector of castings and assistant (paid on department pay roll)	1,765	00
Engineers and assistants	20,268	00
Total salaries and wages	\$477,760	34
Water pipes and other castings	163,954	62
Blasting, excavation of trenches, laying and relaying water pipes, setting boxes, etc.	95,835	54
Meters:		
New meters	\$49,347	15
Repairs and extra parts	3,247	82
	52,594	97
Stables, etc.:		
Board, feed, etc.	\$10,725	61
Carriages, wagons, etc. and repairs	5,453	75
Horseshoeing	2,786	30
Harnesses and repairs	1,349	17
Veterinary services and medicines	598	71
Horses, purchase of	325	00
	21,238	54
Tools and machinery and repairs of same, iron, steel, tin, hardware and miscellaneous supplies	18,778	74
Repairs of buildings, streets and structures	15,450	45
Lead and lead pipe	10,635	25
Lumber	6,748	75
Printing	5,037	42
Damages	4,607	24
Traveling expenses	2,937	59
Fuel	2,777	00
Stationery	1,987	09
Telephones	1,628	60
Gravel and crushed stone	901	65
Inspection of castings	866	27
Teaming freights and expressage	812	41
Rents	733	00
Electric lighting	732	90
Taxes	626	85
Launch, repairs and supplies	554	15
Oils	540	69
Postage	473	83
Cement and sand	388	28
Engineers' supplies	376	37
Furniture	330	66
Waterproof clothing	252	09
Bricks	224	55
Advertising	218	30
Professional and expert services	180	50
Gas	146	72
Destroying moth pests	92	46
Ice	53	60
Drain pipe	34	56
Recording papers	34	00
Premium on bond	12	50
Inspection of boilers	10	00
<i>Carried forward</i>	\$890,568	48

AUTOMOBILES.

No. 100.— Division Engineer.

<i>Brought forward</i>		\$890,568 48
Registration and license	\$10 50	
Tires and tubes, new and repairs, ...	232 88	
Gasolene, oils, etc.	118 43	
Storage	288 50	
Repairs and supplies	365 72	
Robe, \$10.00; auto hire, \$5.00	15 00	

Total		\$1,031 03
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No. 80.— Superintendent.

Registration	\$15 00
Tires and tubes, new and repairs, ...	7 35
Gasolene, oils, etc.	15 04
Repairs and supplies	143 36

Total	180 75
-----------------	--------

No. 101.— Engineer Income Branch.

New Buick roadster	\$998 00
Registration	22 00
Tires and tubes, new and repairs, ...	8 75
Gasolene, oils, etc.	25 46
Repairs and supplies	40 70
Storage	90 85

Total	1,185 76
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No. 90.— General Foreman.

Registration	\$10 00
Tires and tubes, new and repairs, ...	148 72
Gasolene, oils, etc.	122 36
Repairs and supplies	589 26

Total	870 34
-----------------	--------

Nos. 83 and 96.— Emergency Cars. (Trucks.)

No. 96 new White truck	\$3,000 00
Registration and license	15 75
Tires and tubes, new and repairs, ...	333 37
Gasolene, oils, etc.	330 34
Repairs and supplies	480 32
Chauffeurs' wages	3,395 03

Total	7,554 81
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*Gasolene, oils, etc.	\$2,071 16
Less gasolene, oils, etc., from stock	624 72

1,446 44

Total cost	\$12,269 13
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Less repairs at department shop, ...	\$103 67
Less chauffeurs' wages, included in pay rolls	3,395 03

3,498 70

8,770 43

Total expenditures current expenses	<u>\$899,338 91</u>
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* Supplied to all department cars.

Details of expenditures under appropriation for service mains and relaying mains for the fiscal year ending January 31, 1914. (From revenue.) Order City Council, August 12, 1913.

Water pipes and castings	\$75,156 02
Laying and relaying mains, etc.	10,777 52
Inspection of castings	1,007 86
Advertising	4 00
Total	<u>\$86,945 40</u>

There was also expended by the Water Service, under an appropriation of \$5,000 from the Reserve Fund, for ice for drinking fountains (order of City Council, approved July 1, 1913), \$4,717.01.

RESERVE FUND.

Amounts paid during the year 1913-14 from Reserve Fund to pensioned employees of the Water Service:

Civil War veterans, twenty-one names on pay roll, January 31, 1914	\$11,418 81
Retired laborers, twenty names on pay roll, January 31, 1914, ...	6,188 51
Total	<u>\$17,607 32</u>

HIGH PRESSURE FIRE SERVICE.

Expenditures during the year 1913-14 from loans:

Salaries and wages:	
Engineers	\$14,526 50
Clerk	1,088 94
Laborers	108 75
Mechanics	47 70
Inspectors	47 25
Foremen	12 25
Total pay roll	<u>\$15,831 39</u>
Water pipes and castings	194,242 01
Construction, Winter street	6,024 66
Architect	3,121 45
Inspection of castings	3,078 10
Electric pumping plant	1,500 00
Tools, machinery, iron, steel, etc.	817 39
Yard	733 39
Printing	567 44
Traveling expenses	505 41
Teaming	312 28
Engineers' supplies	270 02
Paving	252 00
Painting office	148 00
Carried forward	<u>\$227,403 54</u>

<i>Brought forward</i>	\$227,403 54
Stationery	97 27
Hydrant changes	81 33
Telephones	72 60
Hydrant platforms	67 80
Testing metals	36 25
Advertising	33 60
Furniture	18 80
Postage	12 62
	<u>\$227,823 81</u>

Comparative Table of Receipts and Expenditures.
Receipts.

	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
Sales of water.....	\$2,626,564 59	\$2,609,102 39	\$2,764,887 76	\$2,730,398 37	\$2,906,569 76	\$2,947,210 88
Other receipts.....	52,509 31	69,969 60	64,168 20	67,690 88	75,674 49	84,389 48
	\$2,679,073 90	\$2,679,071 99	\$2,829,055 96	\$2,798,089 25	\$2,982,244 25	\$3,031,600 36
Credited from taxes, ...	159,000 00					
Transfers by City Auditor.	16,687 10	59,563 49	.....	31,777 31		
	\$2,695,761 00	\$2,897,635 48	\$2,829,055 96	\$2,829,866 56	\$2,982,244 25	\$3,031,600 36
Balance beginning of year.	.....	.....	.....	† \$11,983 69		
Balance end of year.	.....	.....	\$11,983 69	{ † 31,777 31 † 32,744 66		
			* \$11,983 69	\$64,521 97		

Expenditures.

	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
Current expenses...	\$ \$729,677 14	\$ \$871,367 43	\$ \$860,676 10	\$ \$822,377 46	\$ \$835,072 00	\$899,338 91
Service and relaying mains.	.....	.....	.....	.....	.....	86,945 40
Metropolitan water assessment.	1,789,315 84	1,862,823 42	1,815,658 85	1,825,362 87	1,792,123 83	1,842,127 65
Interest.....	175,010 17	161,963 39	138,460 17	127,280 37	137,875 37	118,673 48
Refunded water rates	1,757 85	1,481 24	2,277 15	2,307 58	2,680 28	1,275 97
	\$2,695,761 00	\$2,897,635 48	\$2,817,072 27	\$2,777,328 28	\$2,767,751 48	\$2,948,361 41

* Taxes.

† Revenue.

‡ Transfer.

§ Amount expended for current expenses and extensions, there being one appropriation only.

The following is a statement of the cost of the existing works on January 31, 1913:

East Boston Reservoir	\$66,103 09
East Boston high service	24,173 26
West Roxbury high service	22,346 56
Pipe yards and buildings	94,832 16
Engineering expenses	57,873 58
Distribution (additions during the year, \$280,980.23)	15,753,234 18
Hyde Park waterworks	468,000 00
Total	<u>\$16,486,562 83</u>

Parker Hill Reservoir transferred to Park Department, June 1, 1912. Order City Council, approved January 25, 1912.

Fisher Hill Reservoir transferred to Metropolitan Water and Sewerage Board, September 11, 1913. Acts 1912, chapter 694. \$150,000 paid into city treasury.

COST OF CONSTRUCTION AND CONDITION OF WATER DEBT.

Cost of construction of waterworks to February 1, 1913 .	\$16,602,511 76
Less cost of Parker Hill Reservoir	\$205,793 81
Less cost of Fisher Hill Reservoir	191,135 35
	<u>\$396,929 16</u>
	<u>\$16,205,582 60</u>
Cost of construction of waterworks to February 1, 1914 .	16,486,562 83
Increase during the year	<u>\$280,980 23</u>
Outstanding loans February 1, 1913, at 3½ per cent	\$818,400 00
Outstanding loans February 1, 1913, at 4 per cent	2,381,050 00
	<u>\$3,199,450 00</u>
Outstanding loans February 1, 1914, at 3½ per cent	\$612,400 00
Outstanding loans February 1, 1914, at 4 per cent	1,874,050 00
	<u>2,486,450 00</u>
Decrease during the year	<u>\$713,000 00</u>
The Water Sinking Fund February 1, 1913, was	\$2,551,192 16
The Water Sinking Fund February 1, 1914, was	1,954,263 42
Decrease during the year	<u>\$596,928 74</u>
Net Water Debt February 1, 1913	\$648,257 84
Water Debt February 1, 1914	\$2,486,450 00
Less Sinking Fund February 1, 1914	1,954,263 42
	<u>532,186 58</u>
Net Water Debt February 1, 1914	<u>\$116,071 26</u>
Decrease during the year	<u>\$116,071 26</u>
Stock on hand February 1, 1914	\$190,630 77
Stock on hand February 1, 1913	144,581 64
Increase during the year	<u>\$46,049 13</u>
Cochituate Water Sinking Fund Receipts for the year 1913-14:	
Interest on investments	\$79,804 38
Interest on bank deposits	3,321 84
	<u>\$83,126 22</u>

HIGH PRESSURE FIRE SERVICE.

Owing to the fact that the location of the pumping station has not been decided upon no construction work was done during the year.

The following contracts for materials have been placed and deliveries made as stated:

CONTRACTORS.	Materials Ordered.	Delivered.
Standard Cast Iron Pipe and Foundry Company, Bristol, Penn.	7,000 tons cast-iron pipe.....	7,000 tons.
Warren Foundry and Machine Company, Phillipsburg, Penn.	685 tons cast-iron pipe specials..	697 tons.
Davis & Farnum Manufacturing Company, Waltham, Mass.	100 tons semi-steel special castings.	106 tons.
Kennedy Valve Manufacturing Company, Elmira, N. Y.	642 valves.....	350 valves.
A. P. Smith Manufacturing Company, East Orange, N. J.	410 hydrants.....	No delivery.
Worcester Pressed Steel Company, Worcester, Mass.	500 hydrant hoods.....	No delivery.
A. P. Smith Manufacturing Company, East Orange, N. J.	450 hydrant auxiliary valves....	No delivery.
Gibby Foundry Company, East Boston, Mass.	182 tons miscellaneous castings..	107 tons.

The post hydrant adopted was designed in the department. Exhaustive tests have been made to determine its friction losses, durability, etc. Detail tests have also been made of the strength of the alloy joints it is proposed to use in the pipe line where unbalanced pressures exist. Street surveys have been completed covering practically the whole area to be protected.

WASTE PREVENTION BRANCH.

A force of twelve inspectors has been continuously employed in locating and in stopping waste both inside of premises and generally throughout the distribution system. Their effective work has been a factor in reducing consumption.

WASTE PREVENTION BRANCH.

Table I.
Waste Prevention.

Premises examined.....	34,558
Special investigations.....	1,848
Waste reports.....	12,679
Re-examined.....	11,484
Found repaired.....	10,963
Not repaired.....	521
Water shut off for waste.....	11

Table II.
Defective Fixtures and Waste.

Tank fixtures leaking.....	6,092
Faucets leaking.....	4,740
Hopper cocks leaking.....	48
Pipes inside leaking.....	445
Pipes outside leaking.....	145
Metered premises with defective fixtures.....	1,156
Hydrants leaking.....	16
Willful waste.....	37

INCOME AND METER BRANCH.

The financial statement of the year again evidences efficient work on the part of this branch. The required number of meters have been set in compliance with the provisions of chapter 52 of the Acts of 1907. The "double high service" in West Roxbury and Hyde Park, about two-thirds of the services in South Boston, and all new premises have been metered.

A notable decrease in consumption occurred in Charlestown, which was put on metered service January 1, 1913, the daily average consumption being reduced from 6,860,200 gallons in 1912 to 4,394,200 gallons, a result due largely to the installation of meters.

The following table shows the results obtained from meters and waste inspection for the past eight years:

YEAR.	Number of Services, Boston.	Meters in Service, Boston.	Percentage of Serv- ices Metered, Boston.	Population of Boston.	Daily Consump- tion of Boston (Gallons).	Daily per Capita of Boston (Gallons).	Population of Metropolitan District.	Metropolitan Daily Consumption (Gallons).	Metropolitan Daily per Capita (Gallons).
1906.....	93,091	5,084	5.5	613,220	90,951,800	148	930,740	117,524,600	126
1907.....	93,942	5,185	5.5	628,520	96,422,800	153	955,760	124,145,600	130
1908.....	94,960	5,380	5.7	643,810	98,379,300	153	973,320	125,441,000	129
1909.....	96,132	12,048	12.5	659,110	94,029,900	143	997,760	119,119,100	119
1910.....	93,780	18,467	19.7	674,400	87,346,700	130	1,022,230	112,092,100	110
1911.....	95,037	25,206	26.5	688,520	85,571,500	124	1,046,630	109,994,800	105
1912.....	*99,700	†34,565	34.8	718,900	90,037,500	125	1,086,690	116,230,700	107
1913.....	101,100	41,168	40.7	735,098	79,390,600	108	1,104,263	103,847,700	94

* Including 2,562 acquired by annexation of Hyde Park.

† Including 1,540 meters acquired by annexation of Hyde Park.

METER BRANCH.

Table I.

General Statement of Work Performed During the Year.

MAKE.	New Sets.	Discontinued.	CHANGED.		Tested.	Repaired in Shop.	Repaired in Service.	Discontinued on Account of Frost.
			In.	Out.				
Hersey disc.....	7,059	461	3,334	2,469	8,734	2,731	385	270
Hersey rotary.....	41	28	200	591	535	226	45	4
American.....	88	28	117	230	366	115	22	6
Crown.....	143	44	381	503	861	351	91	2
Nash.....	28	19	82	123	230	97	24	3
Worthington.....		4	5	82	119	9	20	.....
Worthington disc.....	6	1	26	44	56	23	4	1
Lambert.....	24	12	71	93	186	91	13	.....
Keystone.....	3	2	23	34	60	23	6	.....
Metropolitan.....		3	.....	14	14	1	1	.....
Empire.....	6	1	14	65	37	19	...	.....
Trident.....	8	4	20	20	48	17	4	3
Hersey detector.....	10	.....	1	.....	2	.....	12	.....
Gem.....			10	10	24	6	1	.....
B. W. W.....				1	1	.....		.....
Thomson.....				3	3			.....
Standard.....				1	1			.....
Union.....				1	.....			.....
Totals.....	7,416	607	4,284	4,284	11,277	3,709	628	289

Table II.
Meters in Stock February 1, 1914.

MAKE.	DIAMETER IN INCHES.								Totals.
	$\frac{3}{8}$	$\frac{1}{2}$	1	1 $\frac{1}{2}$	2	3	4	6	
Hersey disc.....	1,794	223	34	45	2	1	....	....	2,099
Hersey rotary.....	379	54	19	28	37	4	5	3	529
Hersey detector.....	....	....	....	....	....	....	1	....	1
Crown.....	221	119	21	18	26	4	5	5	419
Nash.....	58	22	5	2	....	....	....	....	87
Lambert.....	27	10	3	3	....	....	....	....	43
Trident.....	16	....	1	1	....	....	....	....	18
Worthington.....	1	....	3	4	6	....	2	....	16
Worthington disc.....	22	5	1	....	....	....	....	....	28
Keystone.....	13	3	....	....	1	....	....	2	19
Metropolitan.....	....	1	....	....	1	....	....	....	2
American.....	154	67	....	....	....	....	....	....	221
Hersey torrent.....	....	....	....	....	....	....	....	1	1
Empire.....	55	2	....	1	....	....	....	....	58
Gem.....	....	....	....	....	2	4	4	3	13
Standard.....	9	....	....	....	1	....	....	....	10
B. W. W.....	....	1	....	....	....	....	....	....	1
Thomson.....	3	1	....	....	....	....	....	....	4
Union.....	1	....	....	....	....	....	....	....	1
Totals.....	2,753	508	87	102	76	13	17	14	3,570

Table III.

Meters in Service February 1, 1914.

MAKE.	DIAMETER IN INCHES.												Totals.
	$\frac{1}{8}$	$\frac{1}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	3	4	6	8	12		
Hersey disc.....	29,829	2,109	930	1	496	163	56	12	2	.....		33,598	
Hersey rotary.....	340	319	259	.....	149	120	54	22	10	.....		1,273	
Hersey detector.....	.....	.....	.....	.....	.....	.....	3	9	19	7	1	39	
Crown.....	1,004	443	390	.....	205	173	106	60	11	.....		2,392	
Nash.....	441	228	136	.....	43	39	3	.....	.....	.....		890	
Lambert.....	321	113	73	.....	11	21	.....	4	.....	.....		543	
Trident.....	179	6	2	.....	1	3	.....	.....	1	.....		192	
Worthington.....	.....	42	139	.....	34	23	13	1	.....	.....		252	
Worthington disc....	141	40	5	.....	.....	18	.....	.....	.....	.....		204	
Keystone.....	169	82	22	.....	2	2	9	.....	.....	.....		286	
Metropolitan.....	.....	39	5	.....	1	.....	.....	.....	.....	.....		45	
American.....	881	434	.....	.....	.....	.....	.....	.....	.....	.....		1,315	
Worthington turbine..	.....	.....	.....	.....	.....	.....	.....	1	.....	.....		1	
Empire.....	99	2	5	.....	7	.....	.....	.....	.....	.....		113	
Gem.....	.....	.....	.....	.....	.....	1	.....	3	6	.....		10	
Standard.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....		6	
B. W. W.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....		2	
Thomson.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....		4	
Union.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....		2	
Gamon.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....		1	
Totals.....	33,415	3,861	1,966	1	949	563	244	112	49	7	1	41,168	

Table IV.
Meters Purchased.

MAKE.	DIAMETER IN INCHES.									Totals.
	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6	8	
Hersey disc.....	7,001	351	131	171	76	30	12	1	...	7,773
Hersey detector.....	...	...	...	...	...	3	2	4	2	11
Nash.....	1	...	...	...	...	...	...	...	...	1
Trident.....	1	1	1	1	1	...	...	...	...	5
Crown.....	...	...	...	...	...	...	3	...	...	3
Gem.....	...	...	...	...	...	...	1	3	...	4
Totals.....	7,003	352	132	172	77	33	18	8	2	7,797

Table V.
Meters Condemned.

MAKE.	DIAMETER IN INCHES.								Totals.
	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4		
Hersey disc.....	21	...	1	1	1	...	...		24
Hersey rotary.....	1	3	...	...	1	...	...		5
Crown.....	15	3	4	...	1	1	2		26
Worthington.....	1	8	41	14	23	2	3		92
Metropolitan.....	...	18	2	1	...	...	...		21
American.....	1	...	...	...	...	...	...		1
Trident.....	1	...	...	...	...	...	...		1
Keystone.....	1	...	...	...	...	...	...		1
Totals.....	41	32	48	16	26	3	5		171

Table VI.
Meters Repaired in Service.

MAKE.	CAUSES.								Totals.
	Clock Broken.	Cover Broken.	Spindle Leak.	Coupling Leak.	Leak at Stopcock.	Relocated.	Joint Leaking.	Miscellaneous.	
Hersey disc.....	43	7	25	127	16	27	10	130	385
Hersey rotary.....	12	1	10	9	....	....	....	13	45
American.....	1	....	3	2	....	....	10	6	22
Crown.....	22	4	13	10	1	....	2	39	91
Nash.....	2	....	5	5	....	....	....	12	24
Worthington.....	7	2	3	....	....	....	5	3	20
Worthington disc.....	1	....	1	....	....	....	....	2	4
Lambert.....	2	....	6	4	....	....	1	....	13
Keystone.....	3	....	....	1	....	....	....	2	6
Metropolitan.....	....	....	....	....	....	....	....	1	1
Trident.....	....	....	....	....	....	1	1	2	4
Hersey detector.....	6	....	....	....	....	....	....	6	12
Gem.....	....	....	....	....	....	....	....	1	1
Totals.....	99	14	66	158	17	28	29	217	628

Table VII.
Meter Changes.

MAKE.	METERS IN.									METERS OUT.									Totals.
	DIAMETER IN INCHES.									DIAMETER IN INCHES.									
	$\frac{1}{8}$	$\frac{1}{4}$	1	1½	2	3	4	6	Totals.	$\frac{1}{8}$	$\frac{1}{4}$	1	1½	2	3	4	6		
Hersey disc.....	2,712	260	147	110	70	25	10	....	3,334	2,121	191	81	41	24	11	....	....	2,409	
Hersey rotary.....	82	42	31	6	32	3	2	2	200	406	57	39	27	48	7	5	2	591	
American.....	46	71	....	....	....	....	....	....	117	142	88	....	....	....	....	....	....	230	
Crown.....	159	74	65	27	23	11	16	6	381	242	79	64	43	32	17	20	6	503	
Nash.....	31	19	18	9	4	1	....	....	82	62	27	21	10	2	1	....	....	123	
Worthington.....	1	3	1	....	....	....	....	....	5	2	9	32	10	24	1	4	....	82	
Worthington disc.....	15	3	2	....	6	....	....	....	26	28	7	3	....	6	....	....	....	44	
Lambert.....	44	17	5	....	3	....	2	....	71	57	22	10	1	3	....	....	....	93	
Keystone.....	9	5	6	....	1	2	....	....	23	17	7	6	....	1	3	....	....	34	
Metropolitan.....	....	....	....	....	....	....	....	....	....	....	11	2	1	....	....	....	....	14	
Empire.....	13	....	1	....	....	....	....	....	14	63	1	....	1	....	....	....	....	65	
Trident.....	18	2	....	....	....	....	....	....	20	18	1	....	....	1	....	....	....	20	
Hersey detector.....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	
Gen.....	....	....	....	....	....	....	2	8	10	....	....	....	....	....	....	2	8	10	
B. W. W.....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	
Thomson.....	....	....	....	....	....	....	....	....	....	2	1	....	....	....	....	....	....	3	
Standard.....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	
Union.....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	
Totals.....	3,130	496	276	152	139	42	33	16	4,284	3,161	502	258	135	141	40	31	16	4,284	

Table VIII.
Meters Applied.

MAKE.	DIAMETER IN INCHES.									Totals.
	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6	8	
Hersey disc.....	6,665	183	80	73	37	17	3	1	...	7,059
Hersey rotary.....	2	19	12	1	5	1	...	1	...	41
American.....	72	16	...	...	...	...	...	...	...	88
Crown.....	89	17	14	8	5	6	4	...	...	143
Nash.....	12	4	8	2	2	...	...	...	...	28
Worthington disc.....	4	1	...	...	1	...	...	...	...	6
Lambert.....	8	9	5	...	2	...	...	...	...	24
Keystone.....	1	1	...	...	...	1	...	...	...	3
Empire.....	4	...	1	1	...	...	...	...	...	6
Trident.....	5	...	1	...	2	...	...	...	...	8
Hersey detector.....	...	...	...	...	...	3	1	4	2	10
Totals.....	6,864	250	121	85	54	28	8	6	2	7,416

Table IX.
Meters Discontinued.

MAKE.	DIAMETER IN INCHES.						Totals.
	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	4	
Hersey disc.....	376	47	18	11	9	...	461
Hersey rotary.....	5	9	10	...	3	1	28
American.....	24	4	...	...	...	...	28
Crown.....	22	8	8	2	3	1	44
Nash.....	10	3	2	2	2	...	19
Worthington.....	...	1	...	1	...	...	2
Worthington disc.....	3	...	...	...	...	...	3
Lambert.....	6	3	2	1	...	...	12
Keystone.....	1	1	...	...	...	...	2
Metropolitan.....	...	3	...	...	...	...	3
Empire.....	1	...	...	...	...	...	1
Trident.....	4	...	...	...	...	...	4
Totals.....	452	79	40	17	17	2	607

NOTE.—Inclusive in the above table, the following meters were discontinued on account of frost and are to be reset as soon as conditions permit:

Hersey disc.....	270
Hersey rotary.....	4
American.....	6
Crown.....	2
Nash.....	3
Worthington disc.....	1
Trident.....	3
Total.....	289

INCOME BRANCH.

Table I.

Comparative Statement of Water Rates January 31, 1914.

YEAR.	Amount Assessed.	Amount Abated.	Amount Collected.	Balance Outstanding.
1895.....	\$2,266,519 08	\$55,510 53	\$2,211,008 55	.....
1896.....	2,568,246 04	* 95,162 39	2,473,083 65	.....
1897.....	2,630,413 37	53,864 09	2,576,549 28	.....
1898.....	2,342,804 58	* 235,414 43	2,107,390 15	.....
1899.....	2,414,731 72	* 258,449 66	2,156,282 06	.....
1900.....	2,197,026 64	46,873 45	2,150,153 19	.....
1901.....	2,264,845 26	46,713 28	2,218,131 98	.....
1902.....	2,327,996 91	43,706 89	2,284,290 02	.....
1903.....	2,386,428 02	58,050 51	2,328,347 51	\$30 00
1904.....	2,391,751 16	38,290 92	2,352,679 94	780 30
1905.....	2,446,978 39	36,093 08	2,410,871 31	14 00
1906.....	2,524,205 25	37,599 28	2,486,605 97	.....
1907.....	2,619,031 00	34,959 33	2,584,071 67	.....
1908.....	2,645,962 55	36,549 98	2,609,023 23	389 34
1909.....	2,694,338 67	47,703 89	2,645,001 13	1,633 65
1910.....	2,845,949 55	* 113,459 99	2,728,182 17	4,307 39
1911.....	2,861,230 39	59,210 09	† 2,795,923 81	6,096 49
1912.....	3,001,731 88	40,956 23	2,942,561 93	18,213 72
1913.....	2,999,433 43	34,735 57	2,843,630 30	121,067 56
1914 †.....	786,919 80	1,252 57	107,683 23	677,984 00

The above amounts for the years 1895, 1896 and 1897 include both Mystic supply and Cochituate accounts. The contracts to supply Chelsea, Somerville and Everett with Mystic water were abrogated by the Metropolitan Water Act of January 1, 1898.

* These amounts include certain city department accounts abated by order of the Mayor.

† The statement of water rates for the year 1914 represents annual accounts only, as the quarterly meter accounts can only be estimated at this time.

‡ \$875.11 for Hyde Park water rates do not appear in this column; were not assessed on our books.

Table II.

Kind and Number of Fixtures in Use January 1, 1914.

	Number.
Bathtubs.....	120,035
Bowls.....	158,383
Foot tubs.....	240
Sinks.....	222,112
Taps (other than sinks, bowls, etc.).....	41,485
Urinals, automatic.....	6,101
Urinals, otherwise.....	610
Washtubs.....	188,619
Water-closets.....	226,797
Total.....	964,382

Table III.

Number and Amount of Abatements Allowed During the Year 1913.

ON ACCOUNT OF ASSESSMENT FOR YEAR.	Number.	Amount.
1910.....	2	\$8 50
1911.....	57	2,979 73
1912.....	1,101	15,978 73
1913.....	3,447	33,523 38
Totals.....	4,607	\$52,490 34

Table IV.

Application for New Pipes During the Year 1913.

Elevators.....	6
Fire pipes.....	82
Motors.....	—
Service pipes.....	1,401
Total.....	1,489

Table V.

Turning Water Off and On During the Year 1913.

For complaints.....	471
For repairs of service.....	4,457
For non-payment of water bills.....	3,529
For waste.....	12
Turned on first time.....	1,342
Vacancies.....	2,686
Total.....	12,497

Table VI.

Elevators.

Under supervision December 31, 1912.....	573
Discontinued during the year.....	7
Changed to electric.....	4
New elevators accepted during the year.....	6
Under supervision December 31, 1913.....	568
Changed to tank and metered water and now under supervision.....	46
Registering inaccurately and repaired by owner.....	12
Clock cords broken and repaired by owner.....	8
Clock hands broken and repaired by owner.....	5

Table VII.

Motors.

Under supervision December 31, 1912.....	111
Discontinued during the year.....	4
New motors accepted during the year.....	—
Under supervision December 31, 1913.....	107
Motors on meter.....	18

Table VIII.

Fire Pipes.

Under supervision December 31, 1912.....	644
Supervision discontinued during the year.....	—
Premises equipped during the year.....	82
Premises under supervision December 31, 1913.....	726
Premises inspected.....	4,271
Number of inspections of outlet valves.....	55,391
Number of hydrant inspections.....	2,490
Number of valves sealed and resealed.....	4,519
Number of hydrant valves sealed and resealed.....	228
Meter by-passes under supervision of December 31, 1912.....	42
Discontinued.....	—
By-pass additional.....	6
Meter by-passes under supervision December 31, 1913.....	48
Inspections made of by-passes.....	48
By-passes sealed or resealed.....	16

DISTRIBUTION BRANCH.

The organization of this branch is a central yard at 710 Albany street and six outlying yards in East Boston, Charlestown, Brighton, Dorchester, West Roxbury and Hyde Park. At the central yard is a machine shop, a plumbing shop, a carpenter shop and a blacksmith shop. An electrical shop was abolished during the year. The work done consists both of construction, including the manufacture of gates, hydrants, service cocks, pipe boxes, etc., and of mains, which term includes a wide variety of important work which must be quickly and properly done if damage is not to result. An automobile emergency service is maintained at 710 Albany street, with men ready to respond at any time.

The following tables, Nos. 1 to 32, give details of the work done by the Distribution Branch, with its cost where it could be determined:

Table No. I.

Main Lines of Water Pipes and Connections Owned and Operated by the Public Works Department (Water Service), and Number of Valves Set in Same, January 31, 1914.

DIAMETER OF PIPES IN INCHES.																		Totals.
48	42	40	36	30	28	24	20	16	14	12	10	8	6	4	3	2		
Length owned and operated																		
39,184	16,813	23,104	47,993	97,339	244	77,780	95,021	228,603	5,021	1,315,752	246,378	710,149	1,341,411	117,905	6,755	5,762	4,375,214	
12	6	11	21	58	58	66	74	474	20	2,891	792	2,130	4,124	649	16	12	11,356	
23	5	10	29	67	2	38	41	28	.....	31	2	.....	3	.....	.....	.....	279	
8	3	6	13	30	.....	19	42	58	.....	138	23	60	105	51	4	1	561	
Length laid and related during year 1913-14 (feet).....																		
.....	12	.....	720	7	.....	731	68	7,814	.....	40,136	34,646	27,406	2,214	17	.....	.....	113,771	
.....	.....	.....	2	2	.....	.....	5	18	.....	131	126	131	25	.....	.....	.....	438	
.....	.....	.....	2	2	.....	.....	2	2	.....	3	.....	.....	3	.....	.....	.....	13	
.....	.....	.....	.....	.....	.....	.....	.....	4	.....	5	2	12	3	1	.....	.....	23	
Length abandoned during year 1913-14 (feet).....																		
.....	241	.....	4	7	.....	224	18	273	.....	6,627	1,702	6,249	37,044	2,551	.....	.....	54,940	
.....	.....	.....	.....	.....	.....	.....	1	3	.....	16	10	20	118	15	.....	.....	182	
.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1	10	.....	.....	.....	.....	2	
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	1	.....	1	.....	.....	14	
Length taken by Metropolitan Water and Sewerage Board during year 1913-14 (feet).....																		
28,547	1,108	6,999	10,453	21,266	.....	3,913	3,514	.....	.....	19	.....	.....	.....	.....	.....	.....	75,819	
4	2	3	5	12	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	29	
.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	
11	2	3	4	5	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	
7	.....	3	5	7	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Lengths owned and operated January 31, 1914 (feet).....																		
10,637	15,476	16,105	38,256	76,073	244	74,374	91,557	236,144	5,021	1,349,242	279,322	731,306	1,306,581	115,371	6,755	5,762	4,358,226	
8	4	8	18	46	.....	65	78	489	20	3,005	908	2,241	4,031	634	16	12	11,583	
.....	.....	.....	27	62	2	38	42	30	.....	34	2	.....	3	.....	.....	.....	262	
12	3	7	27	62	.....	16	42	58	.....	142	24	62	107	52	4	.....	546	
1	3	3	8	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

Total, 825.42 miles in the system January 31, 1914.

Table No. II.

Hydrant, Blow-off and Reservoir Pipes.

	DIAMETER IN INCHES.								Totals.
	16	12	10	9	8	6	4	3	
Total length connected with system January 31, 1913.....	474	6,404	186	2,005	4,022	49,478	6,495	44	69,768
Length laid and relaid during the year.....					295	4,018			4,313
Length abandoned during the year.....		6	10	10	101	1,045	12		1,184
Length taken by Metropolitan Water and Sewerage Board.....	445	559			5	60			1,069
Total length connected with system January 31, 1914.....	29	5,899	176	1,995	4,811	52,391	6,483	41	71,828

Table No. III.

Hydrants in System January 31, 1914.

	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Boston.	Chapman Post.	Coffin Post.	Ludlow Post.	Matthews Post.	Totals.
City proper (public).....	582	47	612	183	83	....	....	....	....	1,507
" (private).....	4	....	9	6	39	....	....	....	....	58
Roxbury (public).....	427	78	462	382	32	....	....	....	....	1,381
" (private).....	2	1	3	2	10	....	....	....	....	18
West Roxbury (public).....	78	216	390	653	20	....	....	....	....	1,357
" (private).....	....	....	....	16	1	....	....	....	....	17
Brighton (public).....	64	77	211	388	15	....	....	....	....	755
" (private).....	....	....	....	8	2	....	....	....	....	10
Dorchester (public).....	319	212	599	955	24	....	....	....	....	2,109
" (private).....	....	1	8	1	4	....	....	....	....	14
South Boston (public).....	174	32	277	126	26	....	....	....	....	635
" (private).....	3	....	....	15	28	....	....	....	....	46
East Boston (public).....	76	28	215	153	5	....	....	....	....	477
" (private).....	8	....	....	7	25	....	....	....	....	40
Charlestown (public).....	122	42	153	29	2	....	....	....	....	348
" (private).....	14	1	....	36	5	....	....	....	....	56
Deer Island (private).....	....	....	1	20	....	....	....	....	....	21
Long Island (private).....	....	....	....	6	....	....	....	....	....	6
Thompson's Island (private)....	....	....	....	2	....	....	....	....	....	2
Gallop's Island (private).....	....	....	....	3	....	....	....	....	....	4
Rainsford Island (private).....	....	....	....	3	1	....	....	....	....	4
Quincy.....	....	....	....	9	....	....	....	....	....	9
Hyde Park (public).....	....	1	10	104	....	164	1	9	....	289
" (private).....	....	....	....	....	....	55	....	13	4	72
Total number (public).....	1,842	733	2,929	2,973	207	164	1	9	....	8,858
Total number (private and suburban).....	31	3	21	134	116	55	....	13	4	377

Table No. IV.

*Number and Length of Service Pipes Connected with the System
January 31, 1914.*

SIZE.	Total Number.	Aggregate Length in Linear Feet.
$\frac{1}{8}$ -inch.....	6,962	159,431
$\frac{1}{4}$ -inch.....	81,905	2,300,154
$\frac{3}{8}$ -inch.....	3,042	106,931
1-inch.....	5,275	192,128
1 $\frac{1}{4}$ -inch.....	412	12,837
1 $\frac{1}{2}$ -inch.....	1,461	44,049
2-inch.....	1,998	63,204
3-inch.....	820	24,311
4-inch.....	1,410	51,955
6-inch.....	162	21,544
8-inch.....	39	2,999
10-inch.....	10	1,427
12-inch.....	16	3,569
16-inch.....	2	95
Totals.....	103,514	2,984,634

Table No. V.

Fountains in Service January 31, 1914.

	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.	Style G.	Style H.	Style I.	Style J.	Style K.	Style L.	Style M.	Totals.
City proper.....	7	...	...	...	...	...	...	7	20	13	4	1	1	53
Roxbury.....	4	...	...	1	...	...	...	4	2	6	3	...	...	20
West Roxbury.....	1	...	1	...	...	...	...	...	...	2	4	...	...	8
Brighton.....	...	...	...	...	...	...	...	1	...	...	5	...	...	6
Dorchester.....	5	...	...	...	...	...	1	3	...	1	2	...	...	12
South Boston.....	* 3	...	...	...	...	...	...	4	5	5	1	...	...	18
East Boston.....	4	...	...	...	...	...	...	5	...	3	...	...	...	12
Charlestown.....	5	...	...	...	...	...	...	...	11	6	...	1	...	23
Hyde Park.....	3	...	...	...	...	...	...	1	...	1	...	...	...	5
Totals.....	32	...	1	1	...	1	1	25	38	37	19	2	1	157

* "B" style: Granite fountain. (Gift of Warren Hall.)

FOUNTAIN DESCRIPTION.

- A. Indicates fountain for man and beast, with automatic fixtures for man and beast in warm weather and a continuous flow of water for beasts in cold weather.
 B. Indicates fountain for beasts only. Continuous flow of water during year.
 C. Indicates fountain for man only. Automatic fixtures. In service during warm weather.
 D. Indicates fountain for man and beast. Automatic fixtures for both.
 E. Indicates cold water fountain for man only. Automatic fixtures. In service during warm weather.
 F. Indicates fountain for man and beast, with automatic fixtures for man in warm weather and a continuous flow of water for beasts all the year.
 G. Indicates fountain for man and beast. Hygienic bubble fixtures for man. Continuous flow of water for man and beast all the year.
 H. Indicates fountain for man only. Water of ordinary temperature. Hygienic bubble fixtures controlled by self-closing cocks. In service during warm weather.
 I. Indicates taps on water posts, hydrants and fountains for watering horses.
 J. Indicates fountain for man only. Cold water. Hygienic bubble fixtures controlled by self-closing cocks. In service during warm weather.
 K. Indicates fountain for man and beast, fitted with automatic fixtures controlled by self-closing cock. Bubble fixture for man in warm weather. Continuous flow for beasts all the year.
 L. Indicates fountain for man and beast, bubble fixtures for man, and taps fitted for the purpose of filling pails to water horses, continuous flow for beasts all the year.
 M. Indicates fountain for beasts only, fitted with taps for the purpose of filling pails to water horses. Continuous flow for beasts all the year.

Table No. VI.
Maintenance of Main Pipe.

NATURE OF WORK.	Number of Jobs.	Total Cost.
Gate boxes renewed	538	\$6,946 18
Gates inspected (oiled, tested, covers replaced, etc.)	5,256	2,727 76
Repaving	216	1,692 02
Leaking joints repaired	153	2,288 26
Gate boxes cleaned out	2,489	1,445 41
Gate boxes raised and lowered	556	1,885 92
Gates salted	1,639	367 97
Bridge boxes renewed and repaired	28	475 56
Dead ends blown off	327	513 78
Gate locations marked	4,452	878 23
Gates repaired, etc.	13	89 07
Gates leaking at packing	68	457 46
Bridge boxes painted	6	80 01
Frames and covers broken, etc.	10	69 96
Box tops renewed	99	587 01
Work caused by contractors and corporations, etc.	51	2,485 59
Leaks due to settlement and other causes repaired	49	1,819 83
Gates renewed	11	440 77
Opening and shutting gates	32	210 66
Miscellaneous work	37	1,073 28
Totals	16,030	\$26,534 73

Table No. VII.

Hydrants Established and Abandoned.

	ESTABLISHED.						ABANDONED.							
	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Chapman Post.	Totals.	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Chapman Post.	Ludlow Post.	Boston.	Totals.
City proper (public).....	2	1	57	...	...	60	10	1	9	36	...	...	...	56
“ (private).....	...	...	...	1	...	1	...	...	...	...	...	...	...	...
Roxbury (private).....	...	...	...	2	...	2	...	...	...	...	...	...	...	...
“ (public).....	2	...	47	7	...	56	20	4	3	16	...	...	4	47
West Roxbury (public)....	...	7	57	3	...	67	13	3	...	6	...	...	1	23
Brighton (public).....	2	2	97	6	...	107	12	11	1	12	...	...	2	38
Dorchester (public).....	1	4	80	6	...	91	17	15	3	14	...	...	2	51
“ (private).....	...	...	...	...	...	...	...	...	...	1	...	...	...	1
South Boston (public)....	...	...	15	...	...	15	1	1	2	3	...	...	...	7
East Boston (public).....	...	1	25	...	...	26	7	...	3	3	...	...	1	14
Charlestown (public).....	1	...	25	...	...	26	23	1	1	1	...	...	...	26
Hyde Park (public).....	...	...	2	81	20	103	1	2	...	...	37	4	...	44
Deer Island (private).....	...	...	...	2	...	2	...	...	...	2	...	...	...	2
Gallop's Island (private)..	...	...	...	2	...	2	...	...	...	...	...	...	...	...
Total (public).....	8	15	405	103	20	551	103	37	24	91	37	4	10	306
Total (private).....	...	...	...	7	...	7	...	...	...	3	...	...	...	3

Table No. VIII.

Hydrants Established and Changed.

NUMBER.	Cost of Material.	Cost of Labor, Teaming, etc.	Total Cost.
126 additional hydrants established.....	\$9,055 55	\$3,904 24	\$12,959 79
108 changes in style and location.....	5,856 20	4,501 41	10,357 61
Totals.....	\$14,911 75	\$8,405 65	\$23,317 40

Table No. IX.

Hydrant Repairs.

NATURE OF WORK.	Number of Jobs.	Cost.
Inspected, oiled, cleaned and pumped out on account of cold weather.....	56,997	\$6,467 53
Boxes raised, lowered, reset and repaired.....	681	7,158 50
Hydrant barrels changed, relocated, reset and repaired.....	479	4,658 45
Streets repaved on account of hydrant repairs.....	140	674 87
Hydrants thawed.....	67	358 66
Hydrants painted.....	3,805	597 94
Delivered 1,455 sacks of salt to Fire Department.....	.....	945 75
Totals.....	62,169	\$20,861 72

Table No. X.

Service Pipes Laid and Abandoned.

SIZES OF SERVICES LAID AND ABANDONED.	CITY PROPER.			ROXBURY.			WEST ROXBURY.			BRIGHTON.			DORCHESTER.			SOUTH BOSTON.			EAST BOSTON.			CHARLES- TOWN.			HYDE PARK.			BOSTON HARBOR.			TOTALS.
	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.				
1-inch laid.	1	24	1	18	1	18	1	18	1	18	1	18	1	39	1	39	1	39	1	39	1	39	1	39	1	39	1	39	1	24	
2-inch abandoned.	35	1,232	43	5,957	277	5,957	135	2,856	327	7,911	56	1,488	92	2,451	14	225	61	1,332	14	225	61	1,332	14	225	61	1,332	14	225	61	88	
3-inch laid.	192	4,154	73	1,614	6	161	5	80	115	24	694	62	1,409	14	322	2	50	2	46	2	46	2	46	2	46	2	46	2	381		
4-inch abandoned.	26	774	25	607	6	147	10	218	29	606	4	113	66	1,550	2	50	2	46	2	46	2	46	2	46	2	46	2	46	2	8,549	
5-inch laid.	10	130	1	11	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3,111	
6-inch abandoned.	65	1,566	8	247	3	117	11	314	5	111	2	38	3	132	4	295	2	46	2	46	2	46	2	46	2	46	2	46	2	1,171	
7-inch laid.	20	551	4	105	1	43	2	39	1	46	1	50	1	69	1	33	1	33	1	33	1	33	1	33	1	33	1	33	1	2,866	
8-inch abandoned.	2	48	1	29	1	25	6	160	1	46	1	50	1	69	1	33	1	33	1	33	1	33	1	33	1	33	1	33	1	785	
9-inch laid.	26	654	11	260	2	59	3	85	1	33	4	75	7	262	1	33	1	33	1	33	1	33	1	33	1	33	1	33	1	48	
10-inch abandoned.	26	565	2	48	1	17	2	64	2	49	1	16	2	77	4	177	1	1	1	19	1	19	1	19	1	19	1	19	1	1,428	
11-inch laid.	5	24	1	10	1	34	2	66	1	28	4	39	3	99	2	16	1	1	1	177	4	177	1	177	4	177	1	177	4	1,014	
12-inch abandoned.	13	208	4	107	1	34	2	66	1	28	2	16	3	99	2	16	3	99	2	16	3	99	2	16	3	99	2	16	3	558	
13-inch laid.	8	104	5	109	1	9	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	187	
14-inch abandoned.	53	1,125	5	109	1	9	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	1,643	
15-inch laid.	20	415	2	415	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	20	
16-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
17-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
18-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
19-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
20-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
21-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
22-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
23-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
24-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
25-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
26-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
27-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
28-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
29-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
30-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
31-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
32-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
33-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
34-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
35-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
36-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
37-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
38-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
39-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
40-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
41-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
42-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
43-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
44-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
45-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
46-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
47-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
48-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
49-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
50-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
51-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
52-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
53-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
54-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
55-inch laid.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
56-inch abandoned.	1	52	3	58	2	34	2	44	2	30	4	177	4	15	8	129	1	5	1	10	1	10	1	10	1	10	1	10	1	144	
57-inch laid.	1	52	3	58	2	34	2	44	2</																						

Table No. XI.
New Service Pipes Laid.

SIZE.	Number.	Length in Feet.	Material.	Labor, Teaming, etc.	Repaving.	Blasting.	Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
$\frac{1}{2}$ -inch...	1	24	\$7 97	.....	.....	.....	\$7 97	\$7 97	\$0 33
$\frac{1}{2}$ -inch...	721	17,425	6,171 39	\$8,271 49	\$333 96	\$1,060 50	\$15,837 34	21 97	91
$\frac{3}{4}$ -inch...	69	1,652	760 11	785 75	9 80	206 00	1,761 66	25 53	1 07
1-inch...	40	1,237	647 95	549 48	40 44	.....	1,237 87	30 95	1 00
1 $\frac{1}{4}$ -inch...	9	285	208 56	128 00	10 96	.....	347 52	38 61	1 27
1 $\frac{1}{2}$ -inch...	18	461	424 57	249 71	25 85	.....	700 13	38 89	1 52
2-inch...	19	575	651 56	308 22	54 75	.....	1,014 53	53 40	1 77
3-inch...	12	304	553 93	350 20	4 14	.....	908 27	75 69	2 99
4-inch...	69	1,510	3,427 34	2,376 97	163 76	54 40	6,022 47	87 28	3 99
8-inch...	7	123	641 48	259 74	30 04	.....	931 26	133 04	7 57
10-inch...	4	12	250 87	55 57	.....	.....	306 44	76 61	25 54
	969	23,608	\$13,745 73	\$13,335 13	\$673 70	\$1,320 90	\$29,075 46		
$\frac{1}{2}$ -inch*..	19	142	25 32	82 72	.....	.....	108 04		
$\frac{3}{4}$ -inch*..	3	32	8 16	17 86	.....	.....	26 02		
$\frac{1}{2}$ -inch†..	6	‡	16 10	7 51	.....	.....	23 61		
	969	23,782	\$13,795 31	\$13,443 22	\$673 70	\$1,320 90	\$29,233 13		

* Services previously laid to vacant lots. They have been previously counted in the number of services laid.

† Delivering cocks, uprights, etc., to applicants.

‡ Cocks, uprights, etc.

Table No. XII.
Service Pipes Abandoned and Plugged.

SIZE.	Number.	Length in Feet.	Material.	Labor, Team- ing, etc.	Repaving.	Total Cost.	Credit (Stock Returned).	Net Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
$\frac{1}{2}$ -inch....	1	31	\$1 61	\$5 84	.....	\$7 45	\$3 26	\$4 19	\$4 19	\$0 14
$\frac{1}{2}$ -inch....	188	3,818	20 20	671 33	\$82 86	774 39	263 26	511 13	2 72	14
$\frac{3}{4}$ -inch....	6	85	1 61	51 21	9 54	62 36	16 59	45 77	7 63	54
1-inch....	4	103	1 42	11 73	.....	13 15	4 77	8 38	2 09	08
1 $\frac{1}{4}$ -inch....	1	30	41	12 47	.....	12 88	1 56	11 32	11 32	38
1 $\frac{1}{2}$ -inch....	4	67	1 78	36 94	.....	38 72	34 73	3 99	99	06
3-inch....	2	94	5 88	24 08	.....	29 96	3 96	26 00	13 00	28
4-inch....	11	335	109 54	161 76	27 84	299 14	64 41	234 73	21 34	70
6-inch....	4	114	35 17	38 29	.....	73 46	59 96	13 50	3 37	12
Totals...	221	4,677	\$177 62	\$1,013 65	\$120 24	\$1,311 51	\$452 50	\$859 01		

Table No. XIII.

Laying New Service Pipes, Excavating and Backfilling Done by Applicant.

SIZE.	Number.	Length in Feet.	Material.	Labor, Teaming, etc.	Repaving.	Blasting.	Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
$\frac{3}{8}$ -inch...	257	4,962	\$1,923 45	\$737 94	.....	.....	\$2,661 39	\$10 36	\$0 54
$\frac{1}{2}$ -inch...	26	636	289 33	84 62	.....	\$35 00	408 95	15 73	64
1-inch...	4	79	52 36	15 10	.....	.....	67 46	16 86	85
1 $\frac{1}{4}$ -inch...	1	69	39 17	6 33	.....	.....	45 50	45 50	66
1 $\frac{3}{4}$ -inch...	4	37	42 84	16 50	.....	.....	59 34	14 83	1 60
2-inch...	1	3	8 63	5 08	.....	.....	13 71	13 71	4 57
4-inch...	1	9	39 72	8 33	.....	.....	48 05	48 05	5 34
Totals..	294	5,795	\$2,395 50	\$873 90	.....	\$35 00	\$3,304 40		

Table No. XIV.

Service Pipes Laid, Replacing Others.

SIZE.	LAID.		ABANDONED AND PLUGGED.		Material.	Labor, Teaming, etc.	Repaving.	Blasting.	Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
	Number.	Length in Feet.	Number.	Length in Feet.							
$\frac{3}{8}$ -inch...			2	57							
$\frac{1}{2}$ -inch...	62	1,311	193	4,731	\$391 44	\$550 92	\$17 32	.....	\$959 68	\$15 48	\$0 73
$\frac{3}{4}$ -inch...	25	791	8	86	213 14	368 24	28 56	.....	609 94	24 40	77
1-inch...	59	1,513	26	682	686 50	1,144 75	203 25	.....	2,034 50	34 48	1 34
1 $\frac{1}{4}$ -inch...	5	121	1	18	76 50	86 17	.....	.....	162 67	32 53	1 35
1 $\frac{3}{4}$ -inch...	33	930	5	358	637 77	715 30	175 03	.....	1,528 10	46 31	1 64
2-inch...	21	436	11	73	398 58	465 60	54 37	.....	918 55	43 74	2 11
3-inch...	14	254	8	93	421 76	468 05	18 76	.....	908 57	64 90	3 58
4-inch...	10	112	9	80	301 20	368 82	.....	.....	670 02	67 00	5 98
6-inch...			1	30							
12-inch...	1	30			42 33				42 33	42 33	1 41
	230	5,498	264	6,208	\$3,169 22	\$4,167 85	\$497 29	.....	\$7,834 36		
$\frac{3}{8}$ -inch*	20	547			143 47	188 98	.....		332 45		
1-inch*	3	37			27 79	28 45	.....		56 24		
4-inch*	1	12			25 41	37 92	.....		63 33		
	254	6,094	264	6,208	\$3,365 89	\$4,423 20	\$497 29	.....	\$8,286 38		

* Existing services extended to street line.

Table No. XV.
Service Pipe Repairs.

KINDS OF WORK AND CAUSES.	Number of Jobs.	Cost.
Repaired leaks caused by:		
defective pipes.....	489	\$6,932 84
settlement.....	296	4,825 56
pick hole.....	18	110 86
defective joint.....	29	291 20
electrolysis.....	16	395 63
defective coupling.....	57	666 72
defective cocks.....	78	732 36
gnawed by rats.....	5	57 74
steam roller.....	15	137 83
defective gates.....	3	67 25
defective packing.....	12	90 97
sewer construction.....	41	311 43
Repaved — settlement.....	425	2,844 21
Cleared pipe of rust, dirt and fish.....	645	3,643 34
Sidewalk uprights established, repaired, renewed and relocated,	75	471 42
Sidewalk uprights driven down, oiled and inspected.....	2,990	1,572 97
Sidewalk cocks established, renewed, repaired and relocated....	49	473 43
Operations by contractors and corporations.....	165	606 53
Frozen pipes thawed.....	27	137 51
Gate boxes renewed, repaired and relocated.....	22	289 37
Pipes regulated to proper line and grade.....	87	796 94
Flange boxes established.....	12	82 01
Main cocks renewed, repaired and relocated.....	11	143 10
Abandoned and plugged pipes.....	50	641 96
Defective valves.....	3	13 49
Subway construction.....	172	1,521 90
Shut off and let on.....	8,691	11,119 44
Investigations.....	558	1,208 58
Main uprights established, renewed, regulated and repaired....	19	105 36
Totals.....	15,060	\$40,291 95

Table No. XVI.

Fountains Changed.

<i>Style.</i>	ESTABLISHED.	<i>Style.</i>	ABANDONED.
B.	Everett square, Hyde Park.	H.	(Old style.)
K.	(New style) Blackstone square, east side.	K.	(Old style.)
K.	(New style) Massachusetts avenue, at Westland avenue.	K.	(Old style.)
K.	(New style) Codman square.	K.	(Old style.)
L.	(New style) Fort Hill square.	K.	(New style.)*
L.	(New style) Rutherford avenue, at Eden street.	K.	(New style.)*
M.	(New style) Haymarket square.	B.	(New style.)*
H.	(New style) Bennington street, at Orient Heights.	H.	(New style.)

* Changes made necessary on account of glanders.

FOUNTAINS.

*Established During the Year.**Style.*

- H. Washington street, at Northampton street.
- J. Thompson square.
- H. Bennington street, at Day square.
- H. Blossom street, at Massachusetts General Hospital.
- H. (One bubble.) Brookline avenue, at Longwood avenue.
- H. Blue Hill avenue, at Savin Hill avenue.
- H. Maverick square (at tunnel entrance).
- B. Ornamental stone fountain for horses, Flood square. (Gift of Warren Hall.)

*Abandoned During the Year.**Style.*

- B. Bennington street, at Saratoga street.
- J. Everett street, at Lamson street.

Table No. XVII.
Fountains Repaired.

CAUSES.	Number of Jobs.	Cost.
Troughs and fountains cleaned.....	722	\$401 73
Fountains leaking.....	29	240 65
New door put on.....	3	14 55
Drains stopped up.....	60	186 22
Struck by team.....	14	53 94
Too much force.....	1	3 44
Full of dirt.....	7	20 06
Bad paving.....	6	23 63
Top loose.....	2	4 38
Removing hoods.....	25	92 07
Faucets leaking.....	11	30 69
Handles gone.....	4	11 24
Repaired hydrant attachments.....	14	58 05
Grating broken.....	2	9 94
Coupling loose.....	1	5 99
Waste pipe broken.....	1	6 29
Bubbles put on.....	5	18 91
Feed pipe stolen.....	3	8 13
Put on iron steps.....	2	8 29
Repaired ice box.....	6	21 17
New tablet.....	1	3 25
Below grade.....	1	2 17
Shut-off at main.....	1	5 58
Shut-off on account of glanders.....	4	72 07
Shut-off on account of cold weather.....	32	88 25
Service pipe broken.....	1	5 80
Fountain hole filled in.....	1	6 28
Base settled.....	1	9 79
Totals.....	960	\$1,412 56

Table No. XVIII.

Cost of Establishing and Abandoning Fountains.

NUMBER.	Material.	Labor and Teaming.	Total Cost.
Fifteen established.....	\$1,895 74	\$1,884 49	\$3,780 23
Eleven abandoned.....			

Table No. XIX.

Water Posts Established and Abandoned.

ESTABLISHED.	ABANDONED.
No. 272. Paris street, near Gove street, E. B.	No. 272. Paris street at Meridian street, E. B.
	No. 344. Saratoga street, opposite Bays-water street, E. B.
No. 103. Opposite 27 West Tremlett street, Dor.	No. 103. Wheatland avenue at Washington street, Dor.
No. 435. Cleveland circle, Bri.	No. 435. Beacon street, at Ayr road, Bri.
No. 32. 187 Chelsea street, at Mystic Playground, Chas'n.	
No. 4. Northern avenue, between Piers 1, 2, S. B.	
No. 428. Dorchester avenue, north of Bailey street, Dor.	No. 428. Bailey street, at Dorchester avenue, Dor.
No. 16. Northern avenue, near new fish pier, S. B.	
No. 233. Eustis street, near Washington street, Rox.	No. 233. Palmer street, at Washington street, Rox.
	No. 488. 8-12 Howard street, C. P.

NUMBER.	Material.	Labor and Teaming.	Total Cost.
Eight established.....	\$131 42	\$220 44	\$351 86
Seven abandoned.....			

Table No. XX.
Water Post Repairs.

CAUSES.	Number of Jobs.	Cost.
Valves leaking.....	111	\$243 09
Defective pipe.....	32	353 85
Rotten box.....	17	168 47
Shut-off and put on during season.....	370	358 89
Hit by team.....	7	87 57
Arm broken off.....	12	41 54
Bad paving.....	5	24 54
Relocated.....	6	42 06
2-inch valves repaired.....	180	370 28
Miscellaneous.....	4	45 86
Totals.....	744	\$1,736 15

Table No. XXI.
Meters Set for Income Branch.

NUMBER SET.		Size.	Cost of Material.	Labor, Teaming, Car Fares.	Total.
Outside.	Inside.				
	177	$\frac{3}{8}$ -inch	\$64 74	\$283 96	\$348 70
97.....		$\frac{3}{8}$ -inch	660 54	722 64	1,383 18
	4	$\frac{1}{2}$ -inch	11 10	20 66	31 76
12.....		$\frac{3}{4}$ -inch	78 21	85 46	163 67
	2	1-inch	17 20	25 99	43 19
11.....		1-inch	80 21	78 49	158 70
12.....		1 $\frac{1}{2}$ -inch	85 52	90 84	176 36
9.....		2-inch	68 73	79 13	147 86
1.....		3-inch	7 39	24 16	31 55
6.....		4-inch	37 31	151 07	188 38
3.....		6-inch	35 52	81 41	116 93
2.....		8-inch	7 98	24 99	32 97
153.....	183				
Totals....	336	.....	\$1,154 45	\$1,668 80	\$2,823 25

Table No. XXII.

Meter Repairs.

CAUSES.	Number of Jobs.	Cost.
Box decayed.....	200	\$2,177 59
Set to grade.....	71	321 22
Change frame and cover.....	5	37 49
Covers broken.....	27	51 27
Leaking.....	32	70 24
Bad paving.....	48	231 89
Frozen.....	3	5 44
Full of dirt.....	3	5 25
Box abandoned.....	5	19 39
Box hit by team.....	2	28 70
Reset upright.....	1	4 75
Box relocated.....	5	51 71
Put in 6-inch gate.....	1	34 91
Miscellaneous.....	15	40 11
Totals.....	418	\$3,079 96

Table No. XXIII.

Machine Shop.

Stock Manufactured from the Rough.

KIND.	Number.	Labor.	56 per cent Added.	Stock.	Cost Each.	Total Cost.
Boston post hydrants.....	202	\$14 86	\$23 18	\$28 91	\$52 09	\$10,522 18
Lowry hydrants, 4 feet.....	2	5 66	8 83	19 44	28 27	56 54
3-inch B. O. hydrants.....	27	7 07	11 03	8 77	19 80	534 60
3-inch gates.....	2	4 69	7 32	5 34	12 66	25 32
4-inch gates.....	76	5 74	8 95	7 23	16 18	1,229 68
6-inch gates.....	35	7 33	11 42	13 40	24 82	868 70
8-inch gates.....	199	8 15	12 71	20 35	33 06	6,578 94
10-inch gates.....	111	12 23	19 08	29 53	48 61	5,395 71
12-inch gates.....	65	14 01	21 86	38 23	60 09	3,905 95
16-inch gates.....	17	27 64	43 12	50 29	93 41	1,587 97
$\frac{3}{4}$ -inch sidewalk cocks.....	980	42	66	29	95	931 00
$\frac{1}{2}$ -inch sidewalk cocks.....	50	54	84	46	1 30	65 00
1-inch sidewalk cocks.....	64	66	1 03	75	1 78	113 92
$\frac{3}{4}$ -inch corporation cocks.....	1,996	42	66	32	98	1,956 08
$\frac{1}{2}$ -inch corporation cocks.....	197	52	81	47	1 28	252 16
1-inch corporation cocks.....	202	66	1 03	83	1 86	375 72
1 $\frac{1}{2}$ -inch corporation cocks.....	94	98	1 53	1 64	3 17	297 98
$\frac{1}{2}$ -inch female coupling nuts.....	50	01	02	04	06	3 00
$\frac{3}{4}$ -inch female coupling nuts.....	2,273	02	03	05	08	181 84
1-inch female coupling nuts.....	203	03	05	13	18	36 54
1 $\frac{1}{2}$ -inch female coupling nuts.....	24	05	08	20	28	6 72
1 $\frac{3}{4}$ -inch female coupling nuts.....	307	07	11	28	39	119 73
2-inch female coupling nuts.....	17	08	12	37	49	8 33
1-inch meter coupling nuts.....	36	05	08	13	21	7 56
$\frac{1}{2}$ -inch combination coupling nuts.....	214	05	08	07	15	32 10
1-inch combination coupling nuts.....	100	06	09	10	19	19 00
1 $\frac{1}{2}$ -inch combination coupling nuts.....	100	08	12	18	30	30 00
$\frac{3}{4}$ -inch female coupling tubes.....	6,165	01	02	03	05	308 25
$\frac{1}{2}$ -inch female coupling tubes.....	334	02	03	07	10	33 40
1 $\frac{1}{2}$ -inch female coupling tubes.....	290	08	12	23	35	101 50
2-inch female coupling tubes.....	115	09	14	34	48	55 20
$\frac{3}{4}$ -inch bent tubes.....	397	06	09	08	17	67 49
<i>Carried forward.....</i>						\$35,708 11

Machine Shop.—Continued.

Stock Manufactured from the Rough.—Concluded.

KIND.	Number.	Labor.	56 per cent Added.	Stock.	Cost Each.	Total Cost.
<i>Brought forward</i>						\$35,708 11
$\frac{5}{8}$ -inch bent tubes threaded.....	168	17	27	19	46	77 28
$\frac{3}{4}$ -inch bent tubes.....	196	09	14	13	27	52 92
1 $\frac{1}{4}$ -inch bent tubes.....	50	12	19	49	68	34 00
$\frac{5}{8}$ -inch male couplings.....	200	02	03	09	12	24 00
1 by $\frac{5}{8}$ -inch male and female couplings.	12	08	12	21	33	3 96
1-inch combination coupling.....	100	17	27	34	61	61 00
1-inch combination coupling, bent.....	50	23	36	46	82	41 00
1 $\frac{1}{4}$ -inch combination coupling.....	100	25	39	70	1 09	109 00
2-inch combination coupling.....	83	31	48	98	1 46	121 18
2-inch hose couplings.....	337	11	17	43	60	202 20
1 by $\frac{5}{8}$ -inch solder nipples.....	50	15	23	21	44	22 00
$\frac{5}{8}$ -inch meter nipples.....	104	05	08	14	22	22 88
1 $\frac{1}{4}$ -inch meter nipples.....	237	11	17	24	51	120 87
2-inch meter nipples.....	100	15	23	42	65	65 00
$\frac{5}{8}$ by $\frac{3}{4}$ -inch meter bushing.....	99	10	16	12	28	27 72
$\frac{5}{8}$ -inch plugs.....	487	07	11	01	12	58 44
1-inch plugs.....	100	17	27	03	30	30 00
1 $\frac{1}{4}$ -inch plugs.....	10	21	33	06	39	3 90
Bubble cocks (fountain).....	49	1 19	1 86	1 18	3 04	148 96
Hydrant wastes.....	530	21	33	24	57	302 10
6-inch jointers.....	8	13	20	1 07	1 27	10 16
10-inch jointers.....	2	29	45	1 30	1 75	3 50
12-inch jointers.....	12	31	48	1 58	2 06	24 72
16-inch jointers.....	1	42	66	2 15	2 81	2 81
Sidewalk upright, bushings.....	1,455	04	06	19	25	363 75
Total.....						\$37,641 46

Table No. XXIV.
Machine Shop.—*Continued.*
Stock Repaired.

	Number.	Total Cost.
3-inch gate valves.....	4	\$12 30
4-inch gate valves.....	7	8 63
6-inch gate valves.....	27	69 45
8-inch gate valves.....	8	18 70
10-inch gate valves.....	3	11 18
12-inch gate valves.....	8	27 40
16-inch gate valves.....	1	6 48
4-inch Smith gate and valves.....	2	2 49
Lowry hydrants.....	46	152 77
Boston Lowry hydrants.....	9	13 45
Ordinary post hydrants.....	92	301 41
Boston post hydrants.....	27	190 99
Bachelder hydrants.....	24	154 14
Hyde Park hydrants.....	14	23 50
Blow-off hydrants.....	3	3 32
Miscellaneous.....	136	32 18
Totals.....	411	\$1,028 39

Table No. XXV.

Machine Shop.—*Concluded.**Miscellaneous Work.*

	Number.	Total Cost.
Made 1½-inch drilling machines.....	2	\$345 27
Repaired autos.....	5	66 18
Repaired 42 meter plates for meter service.....	42	65 82
Burning out joints on Long Island.....		61 43
Improving gate-hoisting machine.....	1	42 56
Repairs in carpenter shop.....		40 95
Miscellaneous.....	43	138 32
Total.....		\$760 53

Table No. XXVI.

Blacksmith Shop.

Sharpened 5,563 picks, 563 bars, 2,150 chisels and 7 bull points.....	\$1,138 13
Repaired 2,358 tools	855 54
Made 350 new tools	603 48
Repaired 92 wagons, autos, etc.	179 86
Repaired reservoir fence at East Boston	113 16
Labor and stock used on 2 new tool houses	100 17
Miscellaneous	189 86
Total	<u>\$3,180 20</u>

Table No. XXVII.

Carpenter Shop.
Stock Manufactured.

	Number.	Total Cost.
Post hydrant boxes at \$5.68.....	38	\$215 84
Lowry hydrant boxes at \$5.14.....	23	118 22
Boston Lowry hydrant boxes at \$7.07.....	44	311 08
Boston hydrant boxes at \$4.83.....	9	43 47
Small gate boxes at \$4.37.....	148	646 76
Large gate boxes at \$5.48.....	18	98 64
Meter boxes at \$4.91.....	19	93 29
Deacon meter boxes at \$5.48.....	6	32 88
Tops for Lowry and post hydrant boxes at \$0.69.....	69	47 61
Tops for small gate boxes at \$0.57.....	114	64 98
Tops for large gate boxes at \$0.63.....	36	22 68
Ground meter boxes at \$0.50.....	1,350	675 00
Meter protection boxes at \$0.25.....	613	153 25
Pieces for raising hydrant boxes at \$0.08.....	2,510	200 80
Pieces for raising small gate boxes at \$0.07.....	4,682	327 74
Pieces for raising large gate boxes at \$0.08.....	592	47 36
Pieces for raising meter boxes at \$0.07.....	848	59 36
Wedges for main pipe work and concrete boxes.....	12,972	133 90
Plugs for main pipe work.....	110	119 13
Tool handles.....	509	47 65
Miscellaneous.....		341 29
Total.....		\$3,800 93

Table No. XXVIII.

Carpenter Shop.

Remodeling old paint shop for Meter Department	\$1,619 81
Repairs in stable, 710 Albany street	1,216 76
Repaired 972 tools	653 92
Repaired stable and outbuildings in old sewer yard, Charles- town	566 12
Repairs in yard, 710 Albany street	297 45
Repairs in Brighton yard	295 56
Repairs in East Boston yard	186 42
New tool house	154 91
Repairs on wagons	110 80
<i>Carried forward</i>	\$5,101 75

<i>Brought forward</i>	\$5,101 75
Miscellaneous jobs (21)	107 62
New tool-house for inspectors	102 74
Repairs in machine shop	94 11
Repaired signs on Gallop's Island	89 26
Miscellaneous	367 54
Total	\$5,863 02

Table No. XXIX.

Pattern Shop.

Made 38 new patterns	\$999 06
Repaired 87 patterns	990 97
Changed 6 patterns	237 91
Remodeling high pressure hydrant pattern	139 36
Miscellaneous	56 77
Total	\$2,424 07

Table No. XXX.

Plumbing Shop.

Miscellaneous.

Put in new heater and sink in Charlestown yard	\$42 65
Repairs in machine shop	41 94
Repaired gauges in City Hall	39 65
Repaired bubble cocks on fountains	32 90
New sink and fittings in carpenter shop	32 34
Repairs on gauge glasses at yard, 710 Albany street	23 21
Repairs in blacksmith shop	20 54
Repaired waste pipe, 77 Lenox street, Roxbury	16 34
Repaired pumps (8)	13 53
Miscellaneous	66 26
Total	\$329 36

Table No. XXXI.

Electrical Shop.

Repairs and inspections of indicators and gauges at Orient Heights standpipe, East Boston	\$158 63
Repairs and inspection of indicator and gauge at City Hall	9 76
Miscellaneous repairs and extensions in yards and buildings, including labor, materials, teaming, etc.	136 00
Total	\$304 39

Work discontinued July 31, 1913.

Average Monthly Heights, in Feet, Above Boston City Base, to Which Water Rose at Different Stations.

1913.	SOUTHERN HIGH SERVICE.																		NORTHERN HIGH SERVICE.			
	City Hall.		Engine House No. 24, Quincy and Warren Streets, Roxbury.		Engine House No. 20, Walnut Street, Neponset.		Engine House No. 19, Norfolk Street, Mattapan.		Engine House No. 28, Centre, near Green Street, Jamaica Plain.		Engine House No. 30, Centre, near Bellevue Street, West Roxbury.		Engine House No. 45, Washington and Poplar Streets, Roslindale.		Engine House No. 29, Chestnut Hill Avenue, Brighton.		Engine House No. 48, Winthrop Street and Harvard Avenue Hyde Park.		Engine House No. 5, Marion Street, East Boston.		Engine House No. 32, Bunker Hill Street, Charlestown.	
	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.
January.....	246	234	246	235	245	235	245	238	246	240	246	239	246	241	250	248	244	238	166	158	161	157
February.....	246	234	245	234	245	236	246	238	246	241	246	238	246	241	249	248	243	235	165	157	162	158
March.....	244	230	248	236	247	237	247	238	247	241	247	239	248	243	249	247	245	236	166	158	163	158
April.....	245	230	248	235	247	237	247	238	246	241	246	238	247	241	249	247	245	236	166	158	166	162
May.....	244	230	248	237			242	238	246	239	246	237	246	241	249	247	244	235	166	158	165	158
June.....	245	232	248	236	248	232	245	236	245	240	247	238	247	240	249	246	244	235	165	159	165	160
July.....	245	232	247	236	248	235	248	239	247	241	245	238	247	241	250	247	249	241	166	158	167	163
August.....	246	232	248	237	247	236	249	240	247	242	247	239	247	242	249	246	249	242	164	158	164	159
September.....	246	234	246	235	247	233	247	236	248	241	247	240	247	240	249	248	248	239	164	158	165	162
October.....	246	234	245	234	248	234	247	237			243	237	247	242	250	248	246	237	165	158	165	161
November.....	247	236	246	235	249	235	248	239			246	240	248	243	249	247	244	237	165	158	165	163
December.....	244	233	245	234	246	234	247	238	248	242	244	238	247	242	249	247	244	236	165	159	166	161

Average Monthly Heights, in Feet, Above Boston City Base, to Which Water Rose at Different Stations.

1913.	LOW SERVICE.																	
	Chestnut Hill Pumping Station, Brighton.		Engine House No. 34, Western Avenue, Brighton.		Boston Common.		Engine House No. 8, Salem Street, City Proper.		Engine House No. 7, East Street, City Proper.		Engine House No. 38, Congress and Farnsworth Streets, South Boston.		Engine House No. 2, Fourth and O Streets, South Boston.		Water Service Yard, 710 Albany Street, South End.		Water Service Yard, Gibson Street, Dorchester.	
	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.	3 a. m.	9 a. m.
January....	163	163	162	152	158	145	156	135	159	141	155	138	158	140	162	144	154	137
February....	162	163	160	151	161	144	155	136	157	139	152	133	156	135	158	141	151	133
March.....	163	163	160	151	162	146	155	142	158	142	152	137	155	140	158	143	149	124
April.....	162	163	160	150	161	150			162	146	162	140	162	145	164	146	146	135
May.....	173	163	168	150	170	151	169	145	168	146	168	142	166	144	170	148	162	138
June.....	165	164	163	154	164	151	163	145	162	146	160	144	163	145	165	148	154	138
July.....	163	163	163	158	162	151	160	144	160	146	158	141	160	146	163	147	151	134
August.....	164	164	161	152	163	152	161	143	163	148	157	141	162	145	163	147	150	138
September..	165	164	161	151	164	151	161	146	161	146	159	142	162	143	163	148	151	138
October.....	164	163	160	152	163	150	161	144	161	144	157	141	162	145	163	148	158	141
November..	164	163	162	152	163	152	162	145	163	147	159	142	161	146	162	148	155	137
December...	164	163	162	147	164	146	160	138	161	141	157	136	161	138	161	143	147	125

Table No. XXXII.

Miscellaneous.

Testing work done for high pressure service	\$533 98
Three hundred and thirty-six inspections of patch paving	485 35
Repaired roof in old sewer yard, Rutherford avenue, Charlestown	270 35
Repairs on underpinning of carpenter shop	215 48
Repaired leaking roof on stable at Brighton	192 72
Repaired conductors, roofs and gutters in Charlestown yard, ...	183 67
Inspection on Boylston street subway	103 45
Rebuilt chimney on main building, 710 Albany street	95 55
Miscellaneous repairs and cleaning in yard and reservoir, East Boston	89 37
Set hydrant to new location (Bristol Street Fire Department Headquarters)	87 50
Put in new pipe for fire hose, sanitary garbage plant, Atlantic avenue	85 26
Put in new fire pipe in sanitary building, South street, Dorchester	84 66
Put in new service gate on private line, Boston & Maine Railroad	69 94
Miscellaneous	457 51
Total	<u>\$2,954 79</u>

WATERWORKS STATISTICS — CITY OF BOSTON.

FOR THE FISCAL YEAR ENDING JANUARY 31, 1914.

Date of construction of plant: 1848.

By whom owned: City of Boston.

Source of supply: The Metropolitan Water Works from Lake Cochituate, Sudbury river and Nashua river.

Mode of supply: Both gravity and pumping.

CONSUMPTION.

Estimated population supplied	733,400
Total consumption for year 1913	28,977,569,000 gallons
Passed through meters for year 1913	12,597,420,308 gallons
Percentage of consumption metered	43.5 gallons
Daily average consumption for year 1913	79,390,600 gallons
Gallons per day to each consumer	108 gallons

DISTRIBUTION.

Mains.

Kind of pipe: Cast iron, wrought iron.

Sizes: From 2-inch to 48-inch.

Extended, miles: 11.95.

Sizes, enlarged miles: 9.6.

Total miles now in use: 825.42.*

Public hydrants added: 245.

Public hydrants now in use: 8,858.

Stop-gates added: 227.

Stop-gates now in use: 11,583.

Stop-gates smaller than 4 inches: 28.

Number of blow-offs: 546.

Range of pressure on mains: 30 pounds to 90 pounds.

* During the year 1913 all supply lines outside of Boston were taken by the Metropolitan Water and Sewerage Board, comprising 14.35 miles of pipe (from 12-inch to 48-inch, inclusive), 29 stop-gates and 24 blow-offs.

Service.

Kind of pipe and size: Lead and lead-lined, $\frac{1}{2}$ -inch to 2-inch; cast iron, 3-inch to 12-inch; wrought iron and cement lined, $\frac{3}{4}$ -inch to 2-inch.

Extended, feet: 24,786.

Total now in use, miles: 565.3.

Service-taps added: 1,008.

Total service-taps now in use: 103,514.

Meters added: 7,488.

Total meters now in use: 41,654.

Percentage of services metered: 40.2.

Motors and elevators in use: 675.

Standpipes for street watering: 544.

Yearly revenue from annual water rates \$895,687 12

Yearly revenue from metered water 2,051,523 76

Percentage of total revenue from metered water 69.6

Data — Metropolitan District.

CITIES AND TOWNS.	Valuation, April 1, 1912.	Average Daily Consumption (Gallons), 1912.	Assessments, 1913.
Boston.....	\$1,489,611,817	90,037,500	\$1,842,127 65
Chelsea.....	28,147,960	2,935,500	51,547 66
Everett.....	29,742,700	2,707,800	49,124 16
Malden.....	40,617,596	2,226,300	47,126 88
Medford.....	27,179,600	1,222,900	27,916 12
Melrose.....	17,584,600	1,132,100	22,684 86
Newton.....	16,026,489	.....	6,680 74
Quincy.....	35,475,395	3,003,100	55,519 02
Somerville.....	69,916,340	6,427,500	116,320 88
Arlington.....	14,164,626	1,075,500	20,491 56
Belmont.....	7,555,625	434,500	9,042 70
Lexington.....	8,223,665	356,800	8,267 34
Milton.....	28,178,814	343,300	16,402 68
Nahant.....	9,662,998	158,800	6,181 89
Revere.....	19,924,460	1,495,400	28,587 67
Stoneham.....	5,281,875	590,700	10,213 41
Swampscott.....	12,574,824	443,300	11,254 35
Watertown.....	16,159,165	922,300	19,245 16
Winthrop.....	14,824,820	717,400	15,909 87
Totals.....	\$1,890,853,369	116,230,700	\$2,364,644 60

APPENDIX E.

REPORT OF THE COMMISSIONER FOR THE
BOSTON AND CAMBRIDGE BRIDGES.

BOSTON, February 2, 1914.

MR. L. K. ROURKE,

Commissioner of Public Works:

SIR,—As commissioner for the City of Boston I respectfully submit herewith the annual report of the Boston and Cambridge Bridge Commission for the year 1913-14.

The commission is constituted under chapter 467, Acts 1898, and is composed of two members, one appointed by the Mayor of the City of Boston and one by the Mayor of the City of Cambridge. Francis J. Smith is the commissioner for the city of Cambridge. The division engineer of the Bridge and Ferry Division has been appointed commissioner for the City of Boston.

The commission has charge of the care and maintenance of the following-named bridges connecting the cities of Boston and Cambridge: Prison Point, Cambridge, Harvard, Brookline Street, Cambridge Street-River Street and Western Avenue. The bridge connecting North Harvard street in Boston with Boylston street in Cambridge, at Soldiers Field, has been removed and is being replaced by a new masonry arch bridge to be known as the Anderson Bridge. The new structure is being constructed under the direction of the Metropolitan Park Commission in accordance with chapter 628, Acts 1910; chapter 439, Acts 1911, and chapter 92, Acts 1912. By the latter act, the bridge upon its completion is to be maintained wholly by the cities of Boston and Cambridge, under the direction of the Boston and Cambridge Bridge Commission. It is expected that the bridge will be completed in the spring of 1914.

The expense of the maintenance of the bridges between Boston and Cambridge is borne equally by the two cities.

The City of Boston's portion of the ordinary maintenance cost is paid from the appropriation for the Bridge and Ferry Division of the Public Works Department. During 1913-14 this expenditure amounted to \$17,744.48.

In addition to the ordinary maintenance work on these bridges, the cost of which is given in detail in the table of expenditures for the year 1913-14, extensive repairs were made to Brookline Street Bridge and final payments were made on account of the contract for the reflooring of Harvard Bridge, done in 1912, these amounts being paid from a special appropriation, as noted on page 103 of the report of the Bridge and Ferry Division. The following is the principal repair work done during the year on the bridges under the care of this commission:

BROOKLINE STREET BRIDGE.

In accordance with recommendation made in last year's report, the roadway of this bridge, which formerly had a surface of spruce plank, was paved for its entire length with 3½-inch creosoted yellow pine blocks. The yellow pine under-flooring of the roadway was entirely renewed and new wooden stringers were put in place of such old stringers as were found in poor condition. The work was done under a contract made with James Doherty of Boston, lowest bidder, at a contract price of \$12,645.70, one-half being paid by each city. The paving is laid under a five-year guaranty and affords a most satisfactory roadway. It should prove more economical than the former spruce plank wearing surface of the roadway which had to be renewed at frequent intervals.

MAINTENANCE WORK ON OTHER BRIDGES.

On Prison Point, Cambridge Street-River Street and Western Avenue Bridges, as well as on the draw span of Harvard Bridge, the usual repairs have been made to the plank wearing surface of the roadways. The entire roadway of Prison Point Bridge and of the draw span of Harvard Bridge were resheathed twice during the year owing to the heavy traffic carried by these structures, and at Harvard Bridge it was found necessary to renew several stringers on the draw span. At the Cambridge Street-River Street Bridge the upper portion of the downstream pier was entirely rebuilt and some repairs were made to the deck planking.

RECOMMENDATIONS FOR 1914.

Besides the ordinary maintenance work on the bridges between Boston and Cambridge, extensive repairs are necessary on certain bridges for which special appropriations should be made.

Prison Point Bridge.— The plank surface of the roadway of this bridge should be replaced by some form of permanent wooden pavement, both in the interests of economy and public convenience. The steel work is much rusted and should be thoroughly cleaned and painted. Repairs should also be made to the wharf and fences. The estimated cost of this work is \$12,000, one half of which is to be paid by the City of Boston.

Cambridge Bridge.— The steel superstructure of this bridge is greatly in need of painting. Neglect to properly care for this large and important structure will prove to be a most uneconomical policy, as has been shown by Boston's experience with other bridges. Furthermore, aside from the injury to the steel work which corrosion will cause, the cities of Boston and Cambridge should take pride in keeping this monumental structure in good condition, particularly because of its location in the Charles River Basin. Besides painting, some repairs are needed to the roadway paving. The estimated cost of this work is \$16,000, one half of which is to be paid by the City of Boston.

Harvard Bridge.— The draw pier, draw landings, and the machinery of the draw span are in need of repairs. The estimated cost of this work is \$8,000, one half of which is to be paid by the City of Boston.

Brookline Street Bridge.— The steel work of this bridge should be cleaned by sand blast and painted, at an estimated cost of \$2,000, one half of which is to be borne by the City of Boston.

Tables are appended showing the distribution of the expenses of the commission for the year and statements of the draw openings.

Respectfully submitted,

FREDERICK H. FAY,
Commissioner for the City of Boston.

Expenditures for Year 1913-14.

(Being the City of Boston's Portion (one half) of the Total Expense.)

	Administration.	Essex Street-Brookline Street Bridge.	Harvard Bridge.	Prison Point Bridge.	Cambridge Street-River Street Bridge.	Western Avenue Bridge.	Cambridge Bridge.	Totals.
Salaries, drawtenders and sweepers.....	.....	.....	\$2,949 22	\$2,946 75	\$2,925 19	.....	*\$1,458 11	\$10,279 27
General repairs. ....	.....	\$172 25	288 63	385 25	380 60	\$295 54	58 63	1,580 90
Lumber.....	.....	128 57	197 81	292 49	326 89	149 28	83 51	1,178 55
Iron and machine work.....	.....	.....	225 82	126 87	.....	.....	129 15	481 84
Hardware and supplies.....	.....	4 71	26 14	40 71	45 16	8 92	48 29	173 93
Cleaning and sanding roadways.....	.....	.....	140 39	.....	.....	.....	57 67	198 06
Lighting.....	.....	227 47	895 10	9 48	35 60	35 59	1,704 00	2,907 24
Fuel.....	.....	.....	6 22	18 82	12 70	.....	2 52	40 26
Inspection.....	.....	116 00	182 00	120 00	30 00	80 00	40 00	568 00
Clerical services.....	\$249 98	.....	.....	.....	.....	.....	.....	249 98
Office expenses: Printing, postage, stationery, fares and telephones.....	86 45	.....	.....	.....	.....	.....	.....	86 45
Totals.....	\$336 43	\$649 00	\$4,911 33	\$3,940 37	\$3,756 14	\$569 33	\$3,581 88	\$17,744 48

* Includes amount paid for drawtenders' services on Western Avenue Bridge.

Monthly Summary of Draw Openings.

	CAMBRIDGE STREET- RIVER STREET.			HARVARD.			PRISON POINT.			WESTERN AVENUE.		
	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.
1913.												
February.....	4	2	2	17	2	12	55	10	32	4	2	2
March.....	12	.....	6	18	5	2	42	7	25	5	.....	2
April.....	80	.....	39	97	20	54	35	7	19	67	.....	31
May.....	78	.....	41	131	16	74	61	10	34	78	.....	41
June.....	40	.....	22	66	5	44	49	8	27	30	.....	16
July.....	26	.....	13	16	1	10	47	6	26	18	.....	7
August.....	13	.....	8	89	16	57	40	6	19	7	.....	4
September.....	5	.....	3	85	15	54	103	17	58	2	.....	1
October.....	20	.....	11	98	18	59	40	7	22	5	.....	3
November.....	20	.....	11	76	15	48	29	4	17	9	.....	5
December.....	24	.....	15	92	12	58	56	9	32	26	.....	17
1914.												
January.....	.....	.....	.....	9	1	6	54	7	32	.....	.....	.....
Totals.....	322	2	171	794	126	478	611	98	343	251	2	129

Summary of Drawtenders' Reports, February 1, 1913, to January 31, 1914.

BRIDGE.	TUGS.			BARGES.			ALL OTHERS.			TOTAL NUMBER OF VESSELS.			Cargoes.	Openings.
	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.		
Cambridge Street-River Street.....	162	5	167	12	....	12	140	3	143	314	8	322	2	171
Harvard.....	482	2	484	250	....	250	60	....	60	792	2	794	126	478
Prison Point.....	376	44	420	125	11	136	42	13	55	543	68	611	98	343
Western Avenue to Cambridge.....	118	5	123	.....	.....	.....	125	3	128	243	8	251	2	129
Totals.....	1,138	56	1,194	387	11	398	367	19	386	1,802	86	1,978	228	1,121

DOCUMENT NUMBERS OF ANNUAL REPORTS OF THE
PUBLIC WORKS DEPARTMENT.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report.....	1911	1912	29
Annual report.....	1912	1913	29
Annual report.....	1913	1914	26

[DOCUMENT 27 — 1914.]



ANNUAL REPORT
OF THE
REGISTRY DEPARTMENT
FOR THE YEAR 1913:

BOSTON, MASS., March 2, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— In compliance with the ordinance, I beg leave to report that according to our books there were recorded for the year 1913:

- 19,270 births, including children of nonresident parents.
- 8,144 marriages solemnized in this city.
- 1,564 marriages of residents solemnized out of this city.
- 9,375 marriage licenses issued for the calendar year.
- 11,839 deaths in the city, including nonresidents.
- 724 residents of Boston who died elsewhere.
- 736 stillborn infants.

MARRIAGE LICENSES ISSUED 1913.

January	720	July	668
February	444	August	815
March	667	September	954
April	752	October	934
May	867	November	817
June	1,046	December	691

Total			<u>9,375</u>
-----------------	--	--	--------------

Licenses issued 1907	8,654
Licenses issued 1908	7,798
Licenses issued 1909	8,065
Licenses issued 1910	8,511
Licenses issued 1911	9,131
Licenses issued 1912	9,368

RECEIPTS AND EXPENDITURES.

Receipts.

Received for marriage licenses from February 1, 1913,
to January 31, 1914, inclusive:

Nos. 721 to 9,375 of 1913=8,655 at \$1=\$8,655 00

Nos. 1 to 777 of 1914= 777 at \$1= 777 00

\$9,432 00

Received for certificates for court, bank, insurance
and other purposes 1,062 50

Recording marriages performed out of State of
Massachusetts 5 00

Interest on deposits 7 57

\$10,507 07

Paid to City Collector as per Receipts.

	Marriages.	Certificates.	Out of State.	Interest.	Total.
1913.					
February	\$429 00	\$85 75			\$514 75
March	634 00	93 75			727 75
April	776 00	91 25			867 25
May	846 00	88 00			934 00
June	1,046 00	95 75	\$1 00		1,142 75
July	684 00	87 00		\$2 14	773 14
August	826 00	74 50			900 50
September	931 00	74 00	2 00	1 32	1,008 32
October	948 00	98 75			1,046 75
November	816 00	86 00		2 63	904 63
December	700 00	92 00	1 00		793 00
1914.					
January	796 00	95 75	1 00	1 48	894 23
	<u>\$9,432 00</u>	<u>\$1,062 50</u>	<u>\$5 00</u>	<u>\$7 57</u>	<u>\$10,507 07</u>

PHYSICIANS' RETURNS OF BIRTHS.

RECEIVED.

February 1, 1913, balance due physicians	3,208	\$802 00
February, " received	1,533	383 25
March, " " " " " "	1,634	408 50
April, " " " " " "	1,576	394 00
May, " " " " " "	1,642	410 50
June, " " " " " "	1,568	392 00
July, " " " " " "	1,675	418 75
August, " " " " " "	1,577	394 25
September, " " " " " "	1,727	431 75
October, " " " " " "	1,631	407 75
November, " " " " " "	1,490	372 50
December, " " " " " "	1,642	410 50
January, 1914, " " " " " "	1,728	432 00
Totals	<u>22,631</u>	<u>\$5,657 75</u>

EXPENDITURES.

Paid physicians for 19,688 births at 25 cents, reported from February 1, 1913, to January 31, 1914, inclusive, as per vouchers paid in by me to the auditor, and receipted for by him, viz.:

February	725	births at 25c.	\$181 25
March	987	" "	246 75
April	595	" "	148 75
May	960	" "	240 00
June	1,823	" "	455 75
July	3,894	" "	973 50
August	711	" "	177 75
September	1,000	" "	250 00
October	1,087	" "	271 75
November	1,655	" "	413 75
December	1,163	" "	290 75
January, 1914	5,088	" "	1,272 00
	19,688=		\$4,922 00
Balance due physicians			
February 1, 1914	2,943		735 75
	<u>22,631</u>		<u>\$5,657 75</u>

APPROPRIATION AND EXPENDITURES, 1913-14.

<i>Dr.</i>		<i>Cr.</i>	
February, 1913.		January 31, 1914.	
To amount received	\$38,000 00	By Salaries:	
		Registrar	\$4,000 00
		Assistants	3,286 06
		Clerks	17,386 90
		Messenger and constable	1,416 96
		Typewriting	205 00
		Printing	2,469 78
		Stationery (including type-writers)	705 78
		Advertising	26 40
		Postage	1,135 91
		Telephone	163 92
		Furnishings and office expenses	113 20
		Traveling expenses	57 95
		Birth return fees	4,922 00
		Cartage	9 75
		J. F. Slavin	1,725 00
		Janitor's services	10 00
		Boston Mailing Co.'s services,	10 00
		Balance	355 39
	<u>\$38,000 00</u>		<u>\$38,000 00</u>

SPECIAL APPROPRIATION.

MARKING HISTORICAL SITES.

<i>Dr.</i>		<i>Cr.</i>	
To amount received	\$500 00	By expenditures	\$411 75
		Balance	88 25
	<u>\$500 00</u>		<u>\$500 00</u>

Respectfully submitted,

EDWARD W. MCGLENEN,
City Registrar.



ANNUAL REPORT
OF THE
SCHOOLHOUSE DEPARTMENT
FOR THE YEAR ENDING JANUARY 31, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— In accordance with the provisions of chapter 473 of the Acts of 1901, the Board of Schoolhouse Commissioners submits herewith its twelfth annual report, covering the period from February 1, 1913, to February 1, 1914.

I.

GENERAL STATEMENT.

The Board stated in its last report that the building of the High School of Commerce was held in abeyance pending the action of the Legislature regarding the bill which was introduced to secure the separation of the Administration Building from the High School of Commerce; also the action of the Legislature regarding the bill which was introduced by the Schoolhouse Commissioners asking for an additional \$100,000 to secure a suitable site, in case it was found inadvisable to build on the Fenway.

The Legislature passed the bill authorizing the separation of the Administration Building from the High School of Commerce; but, acting with the advice

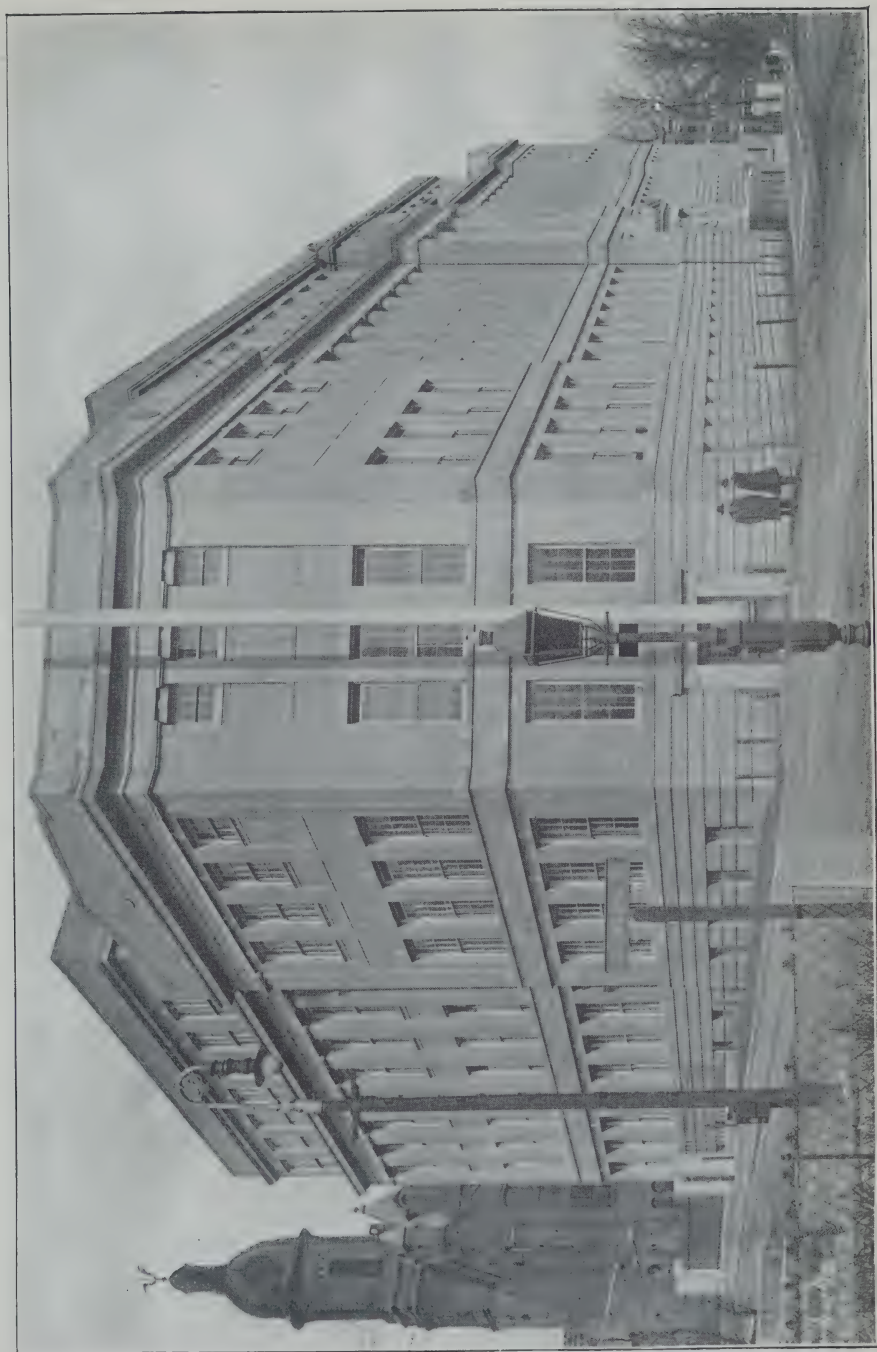
of the Law Department, the Board refrained from putting the building on the Fenway, because the abutters intended to take the matter to the Supreme Court of the United States, and would have obtained an injunction if we had attempted to put the building on the Fenway Park land, and in this way the building would have been delayed for probably a couple of years.

The Legislature also passed the bill giving the School Committee authority to appropriate an additional \$100,000 for this building, provided it was accepted by the Mayor and City Council. The Board, with the consent of the Mayor, requested the City Council to accept the bill and allow us to purchase a suitable site. They referred the matter to the Finance Commission, who, after investigation, recommended its acceptance; but as the Board found it could secure a site where only \$50,000 would be needed, the City Council authorized the School Committee to appropriate this amount.

The School Committee appropriated this amount, and the Board proceeded at once to select a site on Avenue Louis Pasteur, near Longwood avenue. The plans, which had been drawn for the building on the Fenway, were slightly changed to meet the grades of the new site, and the contract for the building was advertised January 31, 1914. The Board hopes to be able to make the contract and have the building started before the 1st of March, and to have it completed about the 1st of July of next year.

The High School of Practical Arts was completed and occupied on November 20. The dedication exercises were held on January 29, and were attended by his Honor the Mayor, the Superintendent of Schools, the Chairman of the School Committee, the Schoolhouse Commissioners and the Architect. This building is the first of its kind erected in this country, so far as we know, and it fully realizes the expectations of the Board.

The chairman of the Board, with the heating and ventilating engineer, attended the Congress on School Hygiene at Buffalo in August of last year, and took part in a round table conference of doctors and engineers gathered from all parts of the country to discuss the present methods of heating and ventilating schoolhouses. As a result of this discussion, the Board is firm in its belief that there is no better method of heating and ventilating schoolhouses known at present than that used in our buildings.



HIGH SCHOOL OF PRACTICAL ARTS.



HIGH SCHOOL OF PRACTICAL ARTS—ASSEMBLY HALL.



HIGH SCHOOL OF PRACTICAL ARTS — GYMNASIUM

The Board was somewhat handicapped last year in starting its work, both on new buildings and repairs, on account of the late date upon which the School Committee made their appropriation, and it is hoped that in the future delays of this kind will be avoided, as it places the Board at a great disadvantage in doing its work. We were fortunately able to get most of our buildings ready for the opening of schools last September, but there were a few buildings where we were unable to complete the work, and it had to be done while the buildings were occupied, much to the inconvenience of the masters, pupils and contractors.

During the past year we were enabled to do a great deal of necessary repairs and alterations, as the School Committee appropriated 10 cents from the 40-cent tax rate intended for new buildings, in accordance with the act passed last year, and transferred it to the 25-cent fund for repairs, so that we had 35 cents for repairs instead of 25 cents. The order appropriating this was passed by the School Committee on May 19, 1913, was presented to the Mayor on May 21, 1913, and vetoed by him on May 29, 1913; but on June 9, 1913, the School Committee passed this item over the veto. This gave the Board the sum of \$143,089.34, in addition to the regular 25 cents, and the Board was able to do a great deal of the major repairs with this additional money. This matter is explained more fully under the heading "Repairs."

The School Committee last year appropriated \$50,000 for land and plans for the new Industrial School, and the Board has secured an excellent site, near the Wentworth Institute and bounded by Parker, Halleck, Archibald and Caldwell streets. The tentative plans are all ready and, as soon as the School Committee appropriates the money, can be quickly completed.

The list of buildings completed during the past year is as follows:

High School of Practical Arts, Emerson District School, John J. Williams School, John D. Philbrick School, Martha A. Baker School, Mozart School, Public Latin Annex and Supply Building, Addition to Brighton High School, Addition to Andrews School, Addition to Samuel Adams School, Addition to Marshall School, two-room building in Mary Hemenway District.

Comparative costs of the buildings erected from the organization of the Board up to 1910, the buildings

up to that time having been built of so-called first-class construction, and the buildings erected since that time and which are of so-called second-class construction are as follows:

Average cost of buildings erected up to 1910:

Lower elementary, 25 cents per cubic foot, \$165.57 per pupil.
Upper elementary, 22 $\frac{1}{2}$ cents per cubic foot, \$192.39 per pupil.

Average costs of buildings erected since 1910:

Lower elementary, 19 $\frac{1}{4}$ cents per cubic foot, \$135.20 per pupil.
Upper elementary, 19 cents per cubic foot, \$153.90 per pupil.

This shows a difference in cost between the two types of buildings of about 24 per cent in the case of the lower elementary and about 25 per cent in the case of the upper elementary.

Our buildings cost about \$5,500 to \$6,000 per room for the lower elementary and from \$6,000 to \$6,500 per room for the upper elementary; and in this connection it is interesting to note from the last year's report of the city of St. Louis that their buildings cost them from \$8,000 to \$9,000 per room.

II.

WORK EXECUTED UNDER THE APPROPRIATION FOR LAND AND BUILDINGS FOR SCHOOLS.

(1.) REPORT OF PROGRESS ON BUILDINGS DESCRIBED LAST YEAR AND ON NEW WORK UNDERTAKEN SINCE THEN.

Of the School Committee's list for 1907-08 the Board reports as follows:

Item 6.—*Phillips District*, elementary school (Peter Fancuil School). This account remains open still, owing to the fact that a portion of the site is yet unpaid for, the matter being in litigation.

Of the School Committee's list for the year 1909-10 (Bond Issue) the Board reports as follows:

Item 13.—*Lyman District*, elementary school, upper grades (Ulysses S. Grant School). (This is Item 2 of the School Committee's list of 1910-11.)

	Original Contract.	Completed Contract.
General contract (all trades)	\$112,000 00	\$116,509 00



PHILIP H. SHERIDAN SCHOOL.

This completes the list of 1909-10 on the Bond Issue, all the other items having been reported on.

Of the School Committee's list for 1911-12 (Bond Issue) the Board reports as follows:

Item 1.—Dearborn District, High School of Practical Arts. This contract was completed and the building occupied on November 20, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$286,786 00</u>	<u>\$298,525 67</u>

This completes the Bond Issue list for 1911-12.

Of the School Committee's list for 1911-12, Tax Levy Appropriation, the Board reported a complete list last year.

Of the School Committee's list for 1912-13 (Bond Issue) the Board reports as follows:

Item 1.—Dearborn District, High School of Practical Arts, completion of building. This has been previously reported on under 1911-12 Bond Issue, as being completed and occupied.

Item 3.—Rice District, South End, Public Latin School, annex and building for Supply Department. This building was completed and occupied on September 10, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$89,410 00</u>	<u>\$91,496 06</u>

Item 4.—Bennett District, Brighton, annex to Brighton High School. This building was completed and occupied on September 10, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$78,460 00</u>	<u>\$86,312 43</u>

Item 5.—Oliver Wendell Holmes District, Dorchester, elementary school, upper grades (Marshall Addition). This contract was completed and building occupied on September 10, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$59,495 00</u>	<u>\$59,375 71</u>

Item 6.—Oliver Wendell Holmes District, Dorchester, elementary school, lower grades. This item had been postponed from the year before, and \$50,000 of the original appropriation had been used for other items which were considered more urgent. The Board advertised for land on March 2, 1912,

and a hearing was held on March 25; and on July 27, 1912, the Street Commissioners were notified to take a parcel of land on Park street, near Washington street. With the balance of the appropriation this land was bought, and Mr. Joseph J. Driscoll was appointed architect and instructed to prepare plans, so that when the new appropriation was made there would be no delay in going ahead with the building.

This completes the list of items under the Bond Issue. Of the School Committee's list for 1912-13 (Tax Levy) the Board respectfully reports the following:

Item 1.—Franklin District, South End, elementary school, lower grades (John J. Williams School). This building was completed and occupied on September 10, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$69,550 00</u>	<u>\$69,138 44</u>

Items 2, 3 and 4 were reported on last year.

Item 5.—Charles Sumner District, West Roxbury, elementary school, lower grades (John D. Philbrick School). This building was completed and occupied on September 22, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$64,350 00</u>	<u>\$59,663 75</u>

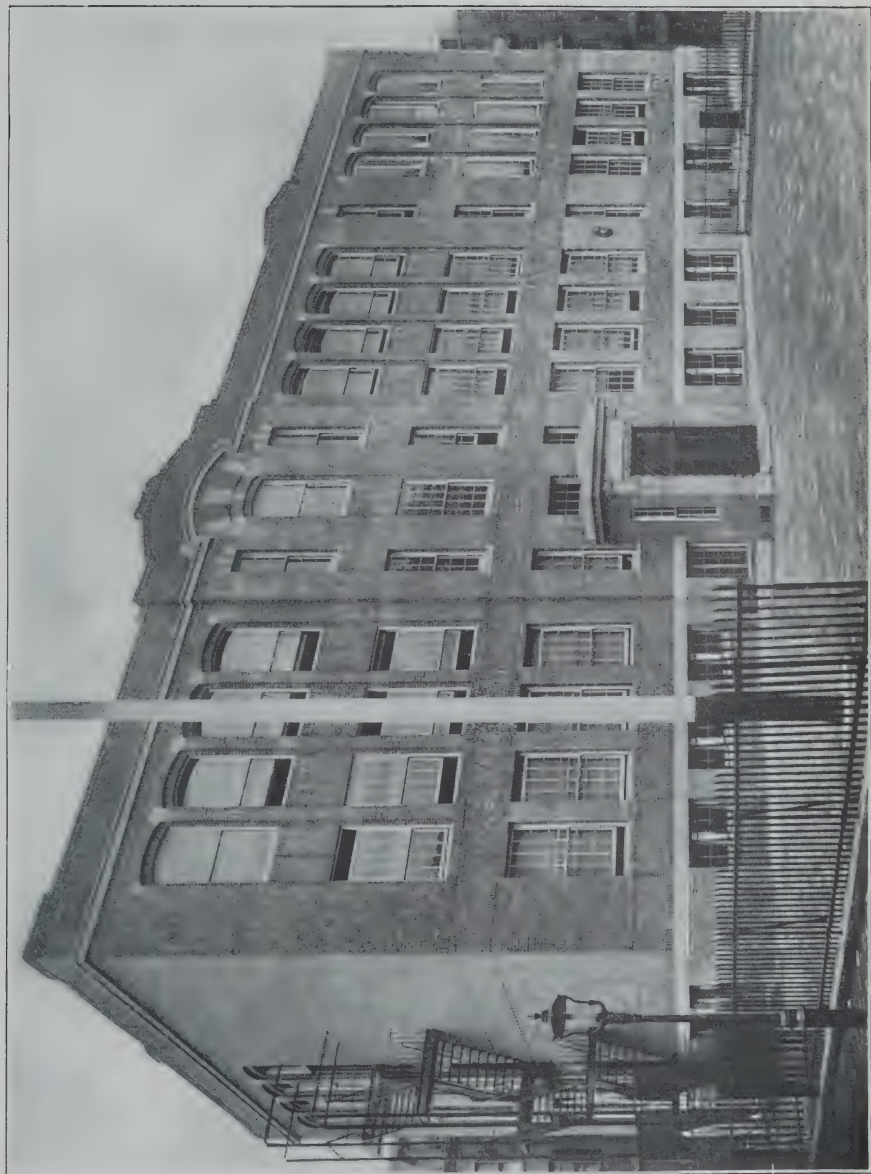
Item 6.—Longfellow District, West Roxbury, elementary school, lower grades (Mozart School). This building was completed and occupied on February 20, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$25,000 00</u>	<u>\$22,891 00</u>

Item 7.—Emerson District, East Boston, elementary school, lower grades. The contract for this building was signed on February 4, 1913, and the building was occupied on January 6, 1914.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$76,650 00</u>	<u>\$70,735 20</u>

The contractor on this building failed a few weeks before the building was completed, and the Board, through the Law Department, made an arrangement with the Bonding Company to complete the building.



JOHN J. WILLIAMS SCHOOL.

Item 8.—*Prince District*, city proper, enlargement of building. This was reported on last year.

Item 10.—*Quincy District*, city proper, Andrews School, enlargement of building. In reporting this item last year, through an error, our report stated that the Board had taken by eminent domain two parcels of land adjoining the Quincy School. It should have said adjoining the Andrews School, in the Quincy District. As stated in the report last year, the Board awarded the contract for one of the wings, which was expected to be completed and ready for occupancy in September. See further report under 1913-14 Bond Issue.

Item 11 was reported on last year.

Item 12.—*Roger Wolcott District*, Dorchester, elementary school, lower grades (Martha A. Baker School). The contract for this building was let on October 18, 1912, and the building was completed and occupied on June 16, 1913.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$25,810 00</u>	<u>\$24,557 91</u>

Item 16 was reported on last year.

Item 18.—*Martin District*, Roxbury, preparation of Normal School yard for use. The Board as yet has done nothing about the grading of this yard, but intends to do so as soon as the weather permits.

Items 20, 22, 24 and 25 were reported on last year.

This completes the list of items of the Tax Levy Appropriation of 1912-13.

On May 20, 1913, the School Committee, in accordance with chapter 450 of the Acts of 1907, sent to this Board the following list of items, with the number of pupils to be accommodated set opposite each school district:

<i>Item 1.</i> — <i>Washington District</i> , West End, elementary school, upper grades, land and plans . . .	1,056
<i>Item 2.</i> — <i>Charles Sumner District</i> , West Roxbury, elementary school, lower grades, completion of building . . .	—
<i>Item 3.</i> — <i>Dearborn District</i> , Roxbury, High School of Practical Arts, remodelling for school purposes of dwelling house in school yard . . .	—
<i>Item 4.</i> — <i>Phillips Brooks District</i> , Dorchester, elementary school, lower grades, land and building . .	704
<i>Item 5.</i> — <i>Bennett District</i> , Brighton, elementary school, upper and lower grades, building only . . .	264
<i>Item 6.</i> — <i>Oliver Wendell Holmes District</i> , Dorchester, completion of elementary school, lower grades . . .	—

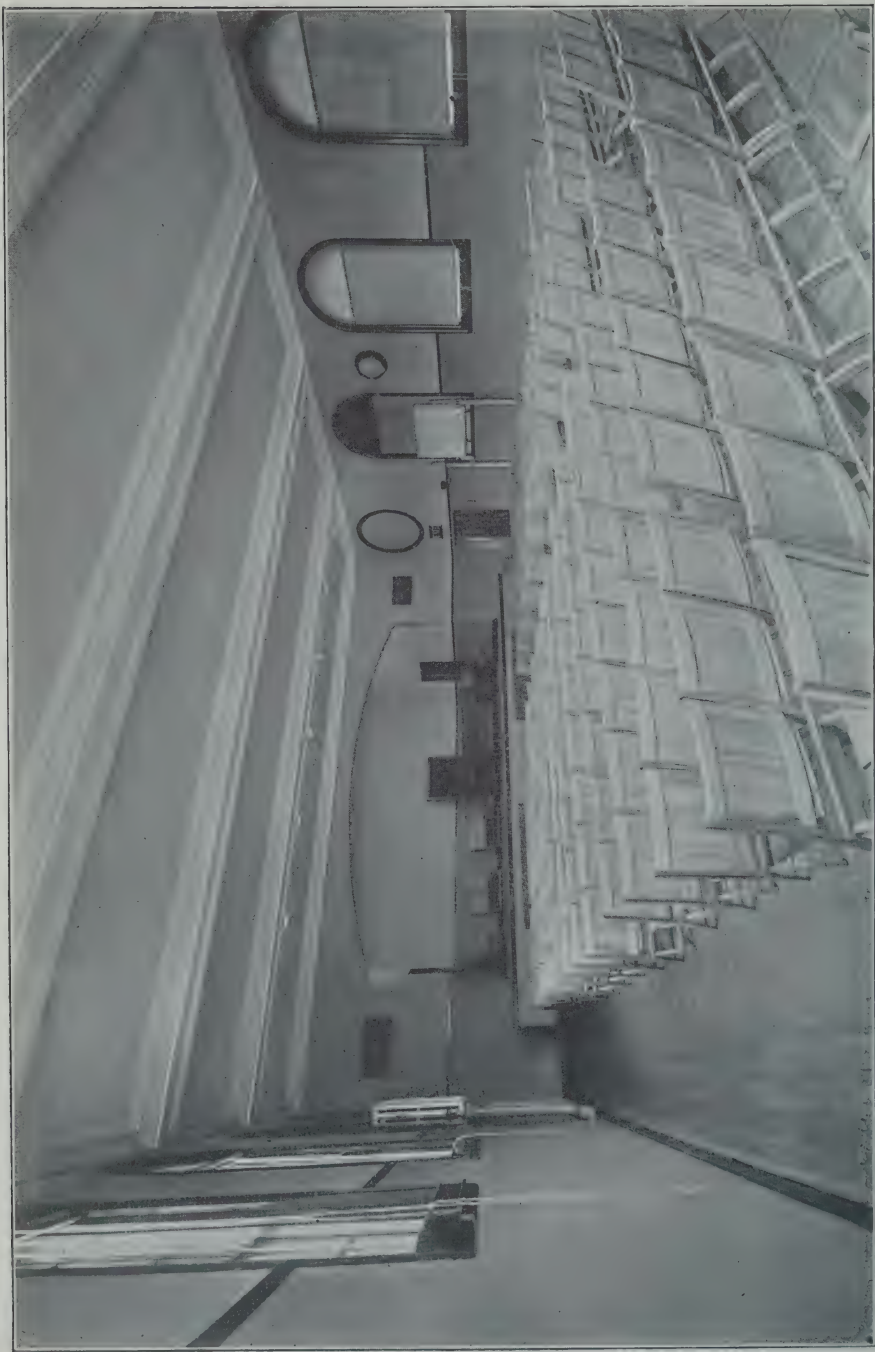
<i>Item 7.</i> —Samuel Adams District, East Boston, Commodore Barry Schoolhouse, division of assembly hall into class-rooms	88
<i>Item 8.</i> —Quincy District, city proper, Andrews Schoolhouse, further enlargement of building	132
<i>Item 9.</i> —Everett District, South End, Trade School for Girls, enlargement of building and erection of a boiler room	—
<i>Item 10.</i> —Rice District, South End, Public Latin School, coal pocket and reinforcement of driveway.	—
<i>Item 11.</i> —William E. Russell District, Dorchester, extension of school yard	—
<i>Item 12.</i> —Everett District, South End, new roof, fire escapes, addition to building, master's office and nurse's room	—
<i>Item 13.</i> —Abraham Lincoln District, city proper, Tyler Street Schoolhouse, extension of school yard,	—
<i>Item 14.</i> —Mary Lyon District, Dorchester, elementary school, lower grades, land only	—
<i>Item 15.</i> —Dudley District, Roxbury, William Bacon Schoolhouse, extension of school yard	—

On May 21, 1913, this Board returned to the School Committee the above list with the amount set against each item which in its opinion would be required for the additional accommodations in each district specified:

Administration expenses	\$39,000
<i>Item 1.</i> —Washington District, West End, elementary school, upper grades, land and plans	100,000
<i>Item 2.</i> —Charles Sumner District, West Roxbury, elementary school, lower grades, completion of building	8,500
<i>Item 3.</i> —Dearborn District, Roxbury, High School of Practical Arts, remodelling for school purposes of dwelling in school yard	5,000
<i>Item 4.</i> —Phillips Brooks District, Dorchester, elementary school, lower grades, land and building	125,000
<i>Item 5.</i> —Bennett District, Brighton, elementary school, upper and lower grades, building only	40,000
<i>Item 6.</i> —Oliver Wendell Holmes District, Dorchester, completion of elementary school, lower grades.	55,000
<i>Item 7.</i> —Samuel Adams District, East Boston, Commodore Barry Schoolhouse, division of assembly hall into class-rooms	2,500
<i>Item 8.</i> —Quincy District, city proper, Andrews Schoolhouse, further enlargement of building	22,000
<i>Carried forward</i>	<u>\$397,000</u>



JOHN D. PHILBRICK SCHOOL.



JOHN D. PHILBRICK SCHOOL—ASSEMBLY HALL.

<i>Brought forward</i>	\$397,000
<i>Item 9.</i> — Everett District, South End, Trade School for Girls, enlargement of building and erection of a boiler room	25,000
<i>Item 10.</i> — Rice District, South End, Public Latin School, coal pocket and reinforcement of driveway	7,500
<i>Item 11.</i> — William E. Russell District, Dorchester, extension of school yard	3,500
<i>Item 12.</i> — Everett District, South End, new roof, fire escapes, addition to building, master's office and nurse's room	35,000
<i>Item 13.</i> — Abraham Lincoln District, city proper, Tyler Street Schoolhouse, extension of school yard, ...	17,000
<i>Item 14.</i> — Mary Lyon District, Dorchester, elementary school, lower grades, land only	5,000
<i>Item 15.</i> — Dudley District, Roxbury, William Bacon Schoolhouse, extension of school yard	10,000
	\$500,000

On May 19, 1913, the School Committee passed an order appropriating the sum of \$288,051, in accordance with the provisions of chapter 615 of the Acts of 1913, for the purpose of constructing and furnishing new buildings, including the taking of land therefor, and for school yards, and the preparing of school yards for use. This was presented to the Mayor on May 21, and was vetoed by him on May 29; but on June 9 the School Committee passed the order over the veto, thereby making available that sum for the purposes mentioned.

Thereupon the Board notified the School Committee that it intended to expend this appropriation from the tax levy for the following items selected from those designated by the School Committee, this being done after consultation with the Superintendent of Schools:

<i>Item 1.</i> — Henry L. Pierce District, Dorchester, Dorchester High School, additional room	\$2,000
<i>Item 2.</i> — Samuel Adams District, East Boston, Samuel Adams Schoolhouse, additional story	45,000
<i>Item 3.</i> — Dudley District, Roxbury, Boston Industrial School for Boys, land and plans	50,000
<i>Item 4.</i> — Prince District, city proper, Mechanic Arts High School, completion of equipment	3,000
<i>Item 5.</i> — Lawrence District, South Boston, elementary school, lower grades, land and building	100,000
<i>Item 6.</i> — Mary Lyon District, Dorchester, enlargement of Mary Lyon School	70,000

<i>Carried forward</i>	\$270,000
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<i>Brought forward</i>	\$270,000
<i>Item 7.</i> — Franklin District, South End, Groton Street School, extension of school yard	9,000
<i>Item 8.</i> — Mary Hemenway District, Dorchester, elementary school, lower grades, land and building, ...	9,000
	<u>\$288,000</u>

In connection with the foregoing lists, the following is a report of the progress made so far:

On the Bond Issue list:

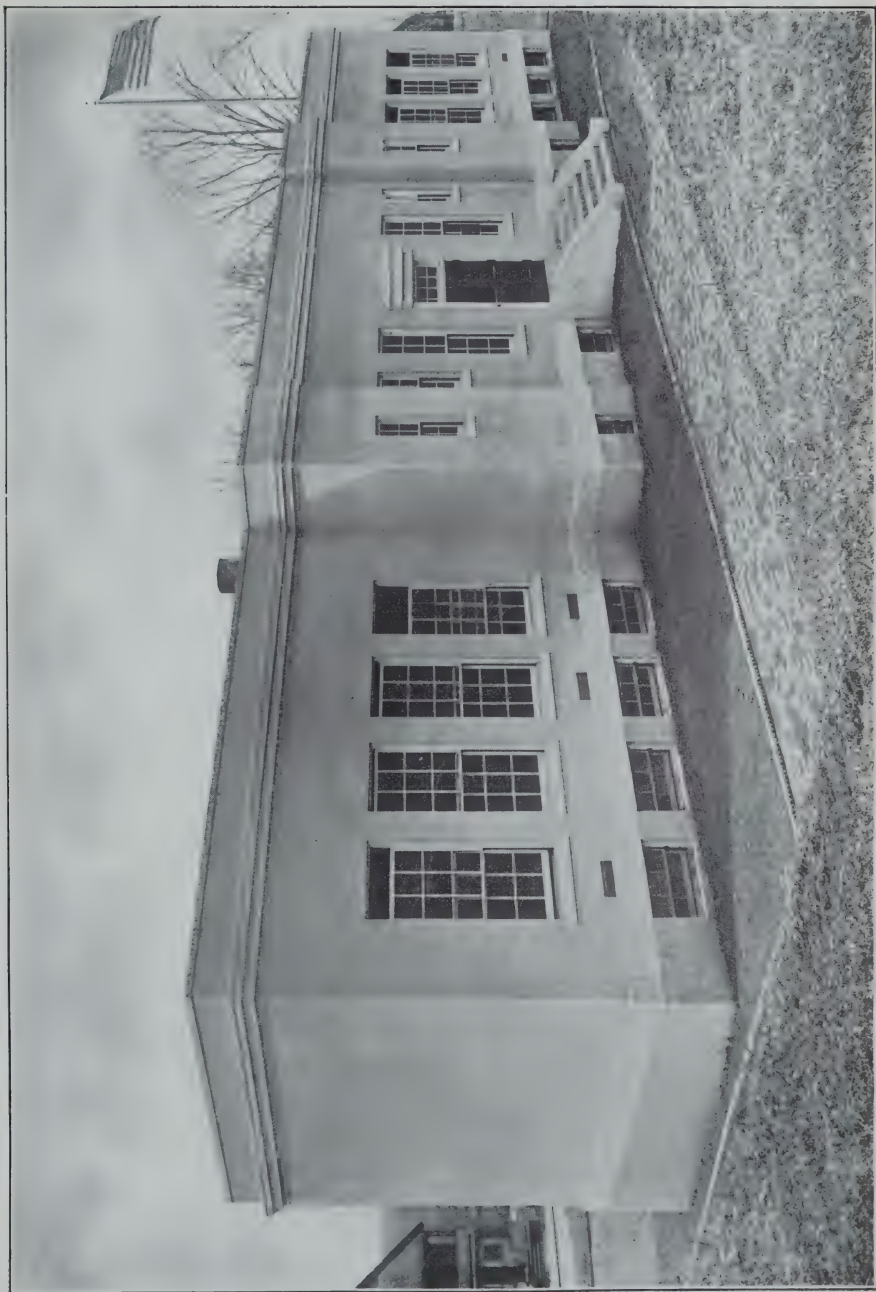
Item 1.— *Washington District*, West End, elementary school, upper grades, land and plans. The Board advertised for land in the Washington District on June 21, but was unable to secure any offers in that district. After consultation with Mr. Kiley, the Board's real estate expert, the Board visited the district, and finally selected three parcels of land, which were in the Wells District, and asked the School Committee to change their request from the Washington to the Wells. The cheapest of these three sites belonged to the Massachusetts General Hospital, but the Board was deterred from taking that, as protests were lodged with it by the trustees, which said that the taking of the site would cripple the hospital.

After consultation with the Finance Commission regarding this, the Board finally decided to take land bounded by McLean street, McLean court and Seabury place. This was done under order of the Street Commissioners of January 30, 1914. Mr. Harrison H. Atwood was employed as architect to draw plans for this building, and is now at work on them. We expect the balance of the appropriation for the building will be made the coming year, and the plans will be ready so that contract can be let and the building finished about the April vacation of next year, 1915.

Item 2.— *Charles Sumner District*, West Roxbury, elementary school, lower grades, completion of building. This has already been reported on as being completed, under 1912-13 tax levy, this money being applied towards its completion.

Item 3.— *Dearborn District*, Roxbury, High School of Practical Arts, remodelling for school purposes the dwelling in school yard. Plans have been completed and contract let, and we expect to get it finished about the 1st of April.

	Original Contract.	Contract to Date.
General contract (all trades)	<u>\$4,787 00</u>	<u>\$4,443 00</u>



MARTHA A. BAKER SCHOOL.

Item 4.—Phillips Brooks District, Dorchester, elementary school, lower grades, land and building. The Board advertised for land on June 21, and a hearing was held on July 8; and on August 12 the Street Commissioners were notified to take a parcel of land on Magnolia street, near Quincy street, containing approximately 44,190 square feet. This was done on September 25. Mr. J. A. Schweinfurth was appointed architect on October 21, to draw the plans, and the work is now advertised. We expect to let the contract about the 1st of March, and hope to have the building completed about the 1st of October.

Item 5.—Bennett District, Brighton, elementary school, upper and lower grades, building only. The city owned the land on which this building is being erected. On June 23 the Board appointed Richardson, Barott & Richardson as architects, plans were prepared, and contract was let on December 30. The Board expects the work will be completed and building ready for occupancy at the opening of school in September.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$37,379 00</u>	<u>\$36,677 00</u>

Item 6.—Oliver Wendell Holmes District, Dorchester, completion of elementary school, lower grades. This item was reported on under 1912-13 Bond Issue. With the appropriation at its command, the Board had bought the land and appointed the architect. The School Committee gave us an appropriation of \$55,000 to go ahead with the building, and contract was let on July 9. We expect to have the building completed by the April vacation.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$68,000 00</u>	<u>\$59,787 05</u>

Item 7.—Samuel Adams District, East Boston, Commodore Barry Schoolhouse, division of assembly hall into class-rooms. This work was completed and the class-rooms occupied in September.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$2,300 00</u>	<u>\$2,321 00</u>

Item 8.—Quincy District, city proper, Andrews Schoolhouse, further enlargement of building. This was reported on under 1912-13 Tax Levy. The School Committee made an appropriation of \$22,000 to complete the second wing, and contract was made on June 18. The east wing was completed and occupied on September 10, and the west wing on November 17.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$46,925 00</u>	<u>\$49,362 69</u>

Item 9.—Everett District, South End, Trade School for Girls, enlargement of building and erection of boiler room. The Board purchased the adjoining building at a cost of \$14,500, and built the new boiler room in the basement of this building. The building was remodelled and fitted up for trade school purposes, and was occupied on January 1, 1914.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$8,980 00</u>	<u>\$9,249 40</u>

Item 10.—Rice District, South End, Public Latin School, coal pocket and reinforcement of driveway. This was reported on under Item 3 of the Bond Issue list of 1912-13.

Item 11.—William E. Russell District, Dorchester, extension of school yard. The Board bought this land, as agreed upon with the School Committee, and expect to add it to the playground during the coming season.

Item 12.—Everett District, South end, new roof, fire escapes, addition to building, master's office and nurse's room. On this item the Board put new roof on the Everett building, altered the building and it was occupied at the opening of school in September. Contract was made for the building of the hall on October 6, and we expect it to be completed by March 6. The hall will contain master's office and nurse's room. Including building of hall and new roof,

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$32,724 00</u>	<u>\$31,126 51</u>

Item 13.—Abraham Lincoln District, city proper, Tyler Street Schoolhouse, extension of yard. The Board purchased the adjoining property, which had been used as a stable, for \$16,621.26. The tenants have been notified to quit on the 1st of March, and the building will be removed and the yard filled in and paved so as to be available for playground purposes.

Item 14.—Mary Lyon District, Dorchester, elementary school, lower grades, land only. The Board advertised for land on February 10, 1912, and a hearing was held on March 4, 1912. On August 12, 1913, the Street Commissioners were notified to take land on Rockdale and Rosewood streets. A portable has been erected on this land for the time being, until such time as it is necessary to erect a new building there.

Item 15.—Dudley District, Roxbury, William Bacon Schoolhouse, extension of school yard. The Board purchased for \$10,000 the estate on Vernon street adjoining the school, the buildings have been removed, and during the coming year the land will be put in condition for use by the pupils.

This completes the items of the Bond Issue list for 1913-14.



MOZART SCHOOL.

On the Tax Levy list:

Item 1.—Henry L. Pierce District, Dorchester, additional room in Dorchester High School. This was completed and ready for occupancy at the opening of school in September.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$2,396 00</u>	<u>\$2,396 00</u>

Item 2.—Samuel Adams District, East Boston, Samuel Adams Schoolhouse, additional story. The Board appointed Brigham, Coveney & Bisbee as architects on this, they having been architects on the original building. Plans were made, and contract was let on September 13. The addition was completed and occupied on January 15.

	Original Contract.	Contract to Date.
General contract (all trades) . . .	<u>\$36,183 00</u>	<u>\$36,294 55</u>

Item 3.—Dudley District, Roxbury, Boston Industrial School for Boys, land and plans. The Board advertised for land in the Dudley District on June 21, and a hearing was held on July 8. After the hearing the Board, with Mr. Kiley, its real estate expert, looked up some land that it thought more suitable, and as this was not in the Dudley District, asked the School Committee to change their request from the Dudley District to the Comins and Sherwin-Hyde Districts, which was done.

On November 18 the Board notified the Street Commissioners to take approximately 115,026 feet on Parker, Halleck and Archibald streets. In the course of a few days it was notified by the Street Commissioners that they could not make the taking, as the amount of land asked for exceeded the two acres which is the limit allowed by statute law for the taking of sites for public buildings. As it is necessary to get a large lot of land for the purpose of developing this building, the Board has introduced a bill into the Legislature asking that the industrial school site be exempted from the provisions of this statute. In the meantime, we have taken some 84,384 feet, and have appointed Mr. James E. McLaughlin architect for this building. Plans have been made, and the Board is ready to proceed with the building as soon as the School Committee makes the appropriation for the ensuing year.

Item 4.—Prince District, city proper, Mechanic Arts High School, completion of equipment. This account had been

closed out last year, and the balance transferred to other items; but on the application of the master of the school the School Committee allowed him \$3,000 again for equipment, and he has a balance now remaining of \$2,145.52, which he expects to use up during the coming year.

Item 5.—Lawrence District, South Boston, elementary school, lower grades, land and building. The Board advertised for land on June 21, and a hearing was held on July 8; and on October 14 the Street Commissioners were notified to take a parcel of land on West Fifth street adjoining the Norcross School. This site was selected, although at the end of the district, because it was very much cheaper than any other site that could be obtained, and there was also the opportunity of getting a larger yard for the Norcross School without any extra expense. The Board appointed Mr. Herbert L. Wardner architect, and contract was made on January 30, 1914. The Board expects the building to be finished and ready for occupancy at the opening of the schools in September.

	Original Contract.	Contract to Date.
General contract (all trades)	<u>\$66,944 00</u>	<u>\$65,400 00</u>

Item 6.—Mary Lyon District, Dorchester, enlargement of Mary Lyon School. The city already owned the land for this addition; which is taking the place of the old Tileston School. Mr. Charles K. Cummings was appointed architect on June 16, contract was made on October 22, and the Board expects the building to be completed and ready for occupancy at the opening of the schools in September.

	Original Contract.	Contract to Date.
General contract (all trades)	<u>\$66,700 00</u>	<u>\$63,857 00</u>

Item 7. Franklin District, South End, Groton Street School, extension of school yard. The Board purchased the adjoining estate in order to enlarge the yard of this building. The buildings on the land are now being removed, and the yard will be ready very soon for use for playground purposes.

Item 8.—Mary Hemenway District, Dorchester, elementary school, lower grades, land and building. The Board advertised for land on June 21, and a hearing was held on July 8. On August 21 the Board of Street Commissioners were notified to take a parcel of land on Everett street, Harrison square. The Board had its engineer move two portables to this lot and connect them together by putting in sanitation, and the building was occupied on December 10, 1913.

	Original Contract.	Contract to Date.
General contract (all trades)	<u>\$3,058 00</u>	<u>\$3,683 94</u>

This completes the Tax Levy list for 1913-14.



PUBLIC LATIN SCHOOL ADDITION.

(2.) FUTURE ACCOMMODATION.

The situation in the West End became so crowded during the past year that the Board had great difficulty in finding suitable rented quarters to take care of the children until such time as the new building can be erected. The School Committee appropriated \$100,000 for plans and a site for a new twenty-four room building in the Wells District. The site has been procured and plans are now being made, and we expect to have them ready when the balance of the appropriation for the building becomes available. There are at present seven rooms in rented quarters and portables, but when the new building is completed it will take care of these and also of the six rooms in the Baldwin, which will then be abandoned.

The new building which is now being erected in the Phillips Brooks District should take care of that section for some years to come. There is need for another elementary school building in the Oliver Wendell Holmes District, and the School Committee will very likely consider it in this year's budget.

During the past year additions were made to the Public Latin and Brighton High Schools, thereby enlarging their capacity.

The conditions in the North End are such that a new building is needed there.

The situation in some of the school districts has changed so rapidly that it is impossible to forecast with any degree of accuracy the conditions that may exist from year to year; and the predictions of the Board in last year's report regarding the accommodations in some of these districts will have to be modified, as we cannot now see how it is possible to drop the loan fund for some time to come.

(3.) FIRE PROTECTION.

During the past year the Board has done a great deal of work in the nature of fireproofing of basements and the erection of fire escapes and exterior exit stairs. We were able to do this, because of the extra money which the School Committee gave us. Most of our buildings have now installed a fire alarm system, which not only gives the alarm for fire to the school, but also calls the Fire Department. We expect during the coming year to complete this installation, so that all our buildings will be equipped in this way.

Fire escapes and exterior exit stairways were erected on the following buildings:

Fire Escapes.— Aaron Davis, Choate Burnham, Cyrus Alger, Everett, Frances E. Willard, Harris, Harvard, Hillside, Julia Ward Howe, Sherwin.

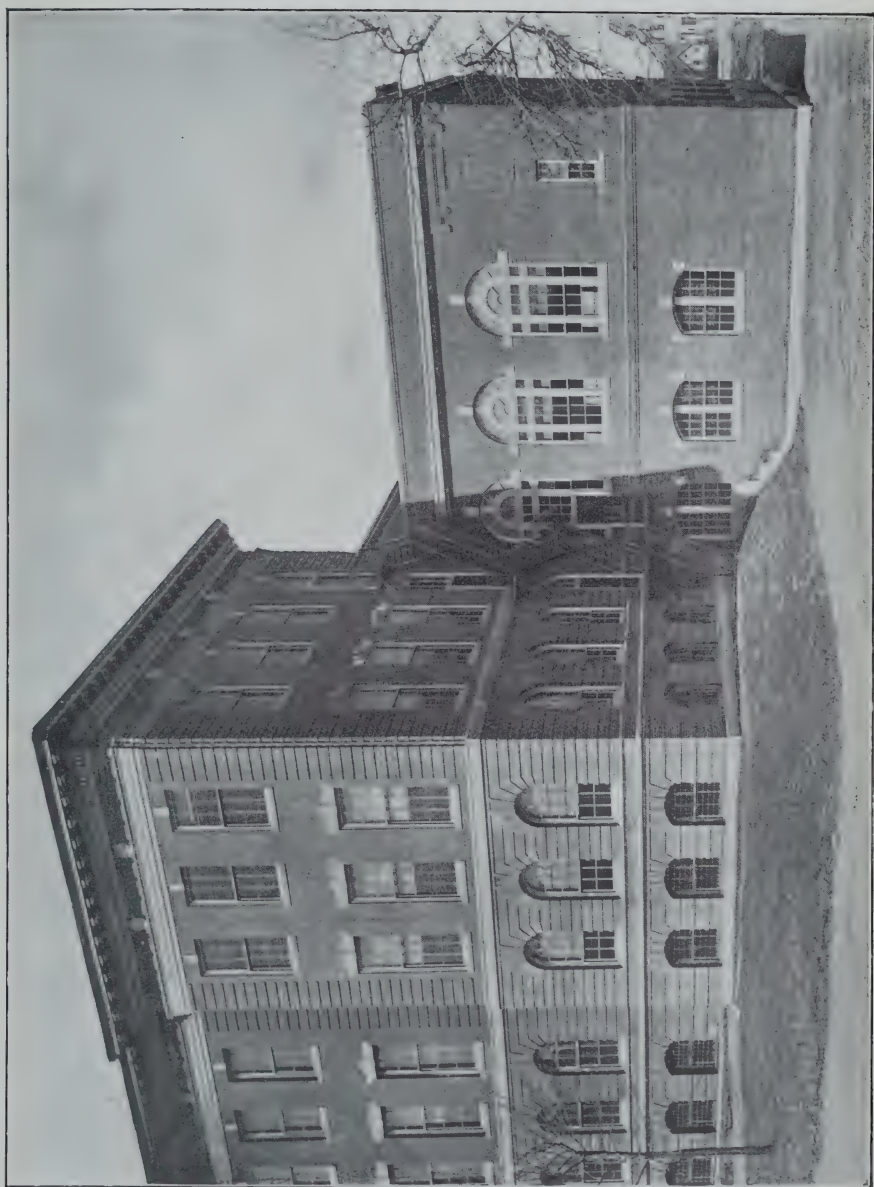
Exterior Stairways.— Dorchester Avenue, Elihu Greenwood, Fairmount, Walnut Street.

The Board expects to continue putting on a number each year until all our buildings are equipped.

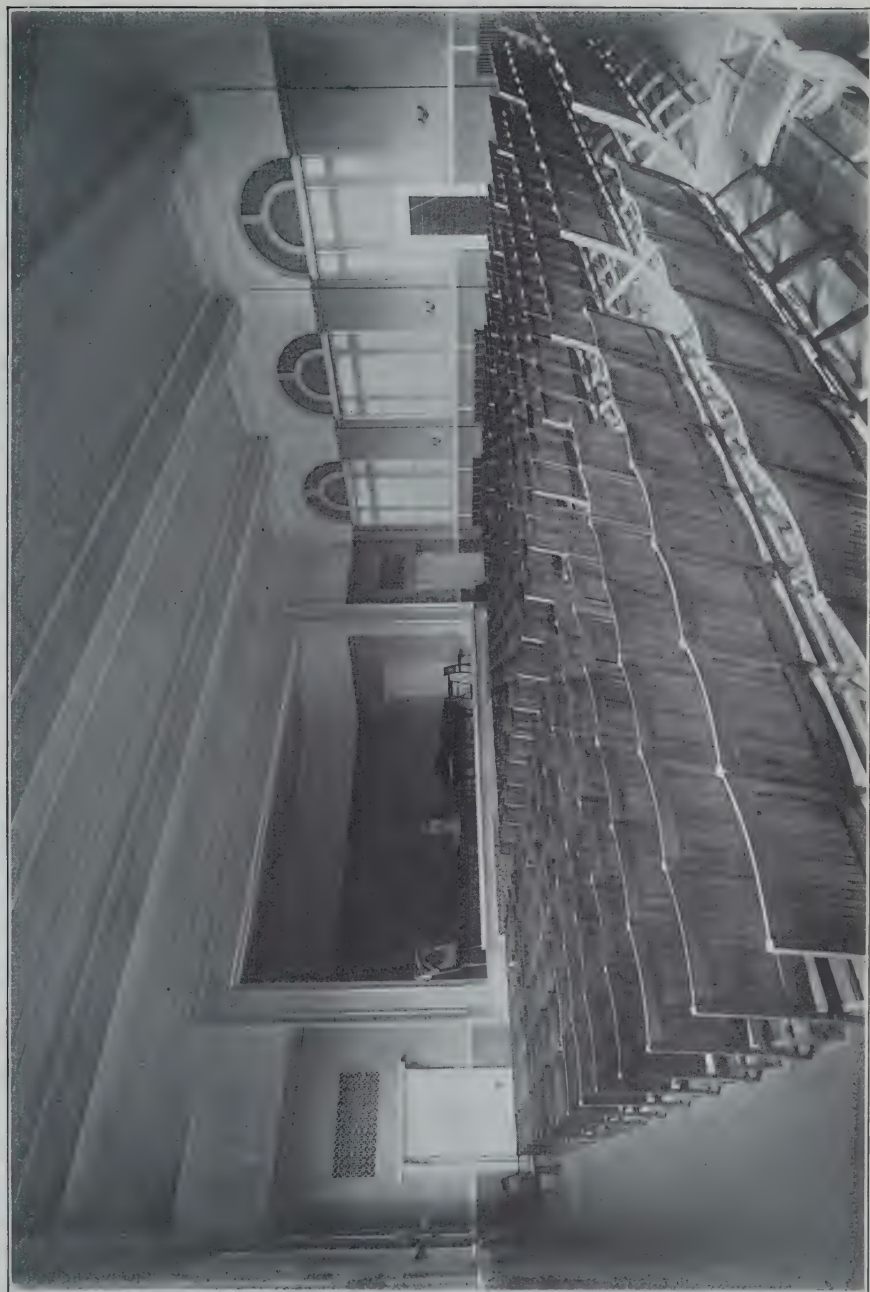
Fireproofing of basement was done in the following buildings:

Abby W. May.	Hyde Park High.
Agassiz.	John A. Andrew.
Auburn.	Lawrence.
Benjamin Cushing.	Lyceum Hall.
Benjamin Dean.	Minot.
Benjamin Pope.	Norcross.
Bigelow.	North Harvard.
Bowditch.	Old Edward Everett.
Chapman.	Old Mather.
Charles Sumner.	Pormort.
Commodore Barry.	Quincy Street.
Damon.	Robert T. Swan.
Drake.	Roxbury High.
Elbridge Smith.	Savin Hill.
Elihu Greenwood.	Smith Street.
Emerson.	South Boston High.
Frederic W. Lincoln.	Theodore Lyman.
Gaston.	Thomas Gardner Annex.
Gilbert Stuart.	Thomas N. Hart.
Hancock.	Trescott.
Harris.	Walnut Street.
Hawes Hall.	Washington Allston.
Hemenway.	Weld.
Henry L. Pierce.	William Brewster.
Hobart Street.	William Wirt Warren.
Hugh O'Brien.	

While it is true that there are quite a number of our buildings without fire escapes, the Board does not consider this condition dangerous. Our policy during the past five or six years has been to prevent fire as much as possible, by making the boiler rooms, coal pockets and basements as nearly fireproof as possible, and relying on the fire drill for the protection of the pupils. Our experience during the past two or three years has confirmed us in our belief that an efficient fire drill is the best possible protection the children can have, and



BRIGHTON HIGH SCHOOL ADDITION.



BRIGHTON HIGH SCHOOL ADDITION — ASSEMBLY HALL.



BRIGHTON HIGH SCHOOL—GYMNASIUM.

the School Committee have been unremitting in their efforts to have this made as nearly perfect as possible. Most of our buildings can be emptied in two minutes from the pulling of the alarm, and in one of the drills which the Board witnessed during the past year, the children, to the number of 2,000, were out of the building in a little less than three minutes after the alarm was given. With such conditions as these the Board is firmly of the opinion that there is little danger from fire for the children in the schools of Boston.

III.

REPAIRS.

Last year the Legislature passed a bill which the Board introduced, requesting that 10 cents be taken from the 40-cent tax for new buildings and transferred to the repair fund. This gave us the additional sum for the past year of \$143,089.34, and we were able to do a great many more major repairs, which were very much needed. The following is a list of the more important items which we did during the year:

Heating and Ventilating Division.—Henry Grew School, two new boilers installed, basement and boiler room fireproofed, new coal room builded, and entire basement floor resurfaced with granolithic. Wendell Phillips School, old furnaces and ventilating apparatus removed, new modern plenum system, together with new boilers and temperature regulating apparatus, installed, entire basement and boiler room fireproofed, and a new chimney builded. Aaron Davis School, old boilers removed, two new ones installed in their place, new chimney builded. Bigelow School, new electric air compressor outfit, for temperature regulating apparatus, installed. John Winthrop and Brighton High Schools, new hydraulic ash hoists.

Electrical Division.—Electric lighting was installed in sixty-two class-rooms (eighteen schools), in addition to miscellaneous items done in connection with work under the supervision of the architectural division. Electric clocks in one school. Intercommunicating telephones in seven schools. Emergency gas lighting in four schools. Interior fire alarm systems in seventeen schools. City fire alarm boxes in four schools. Complete reflectoscope equipment in ten schools.

Plumbing and Sanitation Division.— Henry L. Pierce School, new sanitation. Sherwin and Asa Gray Schools, new conductor systems. Prescott, Bigelow and Gaston Schools, additional toilet accommodations. William Lloyd Garrison School, waterproofed boiler room.

Architectural Division.— New class-rooms in Commodore Barry and Old Mather Schools. Teachers' rooms in the Frothingham, Damon and Everett Schools. Nurse's room in the William E. Endicott School. Book room in the Gilbert Stuart School. Domestic science room and cases and other work at Dorchester High School. Cooking rooms at Norcross and Gaston Schools. Alterations on first floor, in Superintendent's office and in office of Director of Evening and Continuation Schools, at School Committee Rooms. Roof playground at Copley School. Work at West Fifth street shelter, South Boston. Basement stairs and janitor's room at Hillside School. Passage at South Boston High School. Basement exit at Longfellow School. Book-cases for evening schools. Fire escapes on fifteen schools. Fireproofing in forty-nine schools. Manual training benches at Marshall, Gilbert Stuart, Prince, Bigelow, Lawrence, Charles Sumner, Elihu Greenwood, Frederic W. Lincoln and Frances E. Willard Schools.

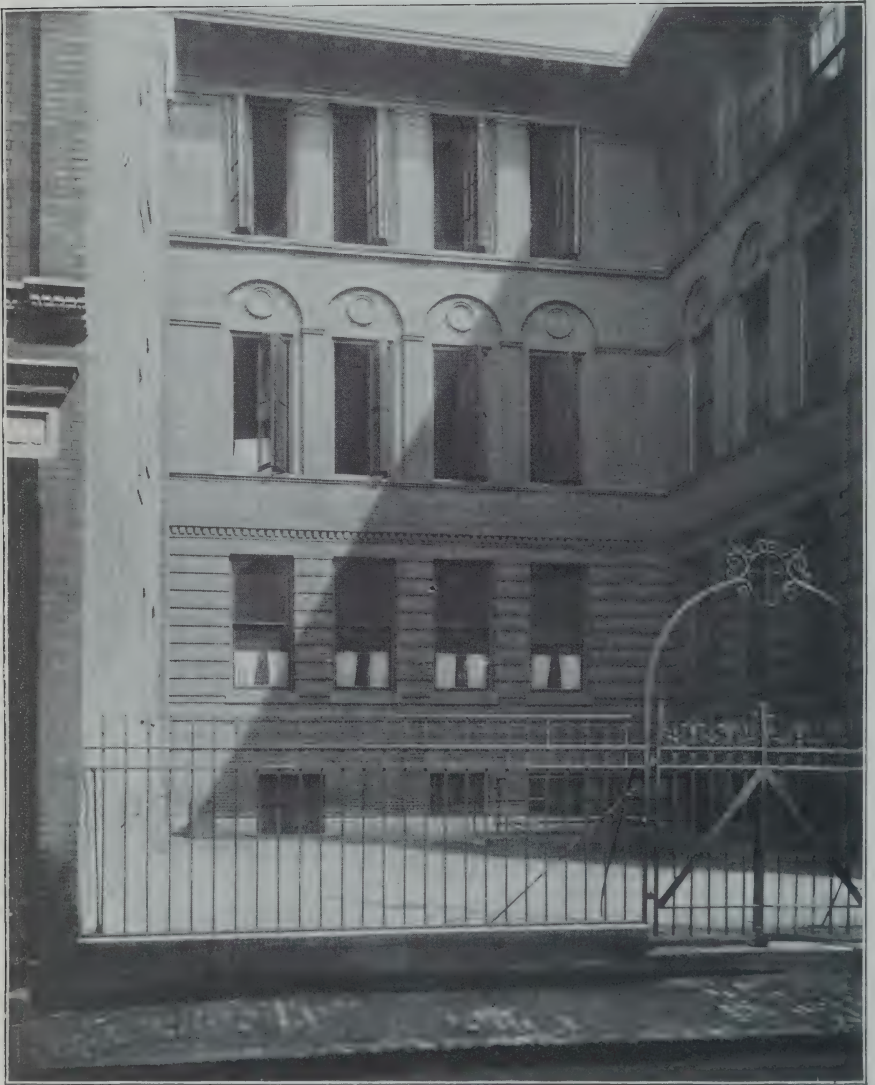
Civil Engineering Division.— Paving and grading yards at Phillips Brooks, Andrews, Cudworth, Thomas N. Hart, Chapman, Damon and Germantown Schools. Resurfacing work at Mayhew and Savin Hill Avenue Schools. Retaining walls and fences at Phillips Street, Samuel W. Mason, William Lloyd Garrison, John Cheverus, Hancock, Joshua Bates, Bennett Annex, Sharp, Bowditch, Mary Hemenway, Robert G. Shaw, Capen, John Lothrop Motley and Christopher Gibson Schools.

With the additional appropriation this year we will be able to continue the major repairs, and expect to complete the fireproofing of the coal pockets and boiler rooms in all the buildings. We expect also to be able to put fire escapes on a number of buildings.

There is a demand from all the older buildings for better artificial light, and the Board expects to install electric lights in about eighteen buildings during the coming year. We also expect to complete the installation of fire alarm systems. Many of our older buildings need better heating and ventilating systems, but as the expense of renewals in this line is very heavy we can only do a few each year. It will require about



ANDREWS SCHOOL ADDITION—EAST WING.



ANDREWS SCHOOL ADDITION — WEST WING.

\$65,000 to complete the equipment of the older buildings with modern sanitation. We expect to spend this year about \$13,000 on this particular portion of the work.

IV.

CONCLUSION.

The Board wishes to express its appreciation of the support of your Honor's predecessor in its efforts to carry out its work; to the officers of the School Committee for their assistance and hearty cooperation; to the Superintendent of Schools, whose valuable assistance has always been at the call of the Board; to the chairman of the Committee on Elementary Schools; and to all the masters in the various districts, who have rendered us efficient aid in carrying on our work.

Respectfully submitted,

CHARLES LOGUE,
CHARLES B. PERKINS,
JOSEPH P. LOMASNEY,
Commissioners.



SAMUEL ADAMS SCHOOL — THIRD STORY ADDITION.

APPENDICES.

APPENDIX I.

 APPROPRIATION FOR LAND AND BUILDINGS FOR SCHOOLS.

I.

TOTAL APPROPRIATIONS AND CREDITS RECEIVED BY THE
DEPARTMENT FROM THE DATE OF ITS ESTABLISHMENT
TOGETHER WITH A SUBDIVISION OF THE EXPENDITURES
TO FEBRUARY 1, 1914.

Appropriations.

Bond issue 1901-02	\$1,000,000 00
Bond issue 1902-03	1,500,000 00
Bond issue 1903-04	1,500,000 00
Bond issue 1904-05	1,500,000 00
Bond issue 1905-06	1,500,000 00
Bond issue 1907-08	1,000,000 00
Bond issue 1908-09	1,000,000 00
Bond issue 1909-10	500,000 00
Bond issue 1910-11	500,000 00
Tax levy 1910-11	529,557 00
Bond issue 1911-12	500,000 00
Tax levy 1911-12	405,000 00
Bond issue 1912-13	500,000 00
Tax levy 1912-13	421,000 00
Bond issue 1913-14	500,000 00
Tax levy 1913-14	288,051 00

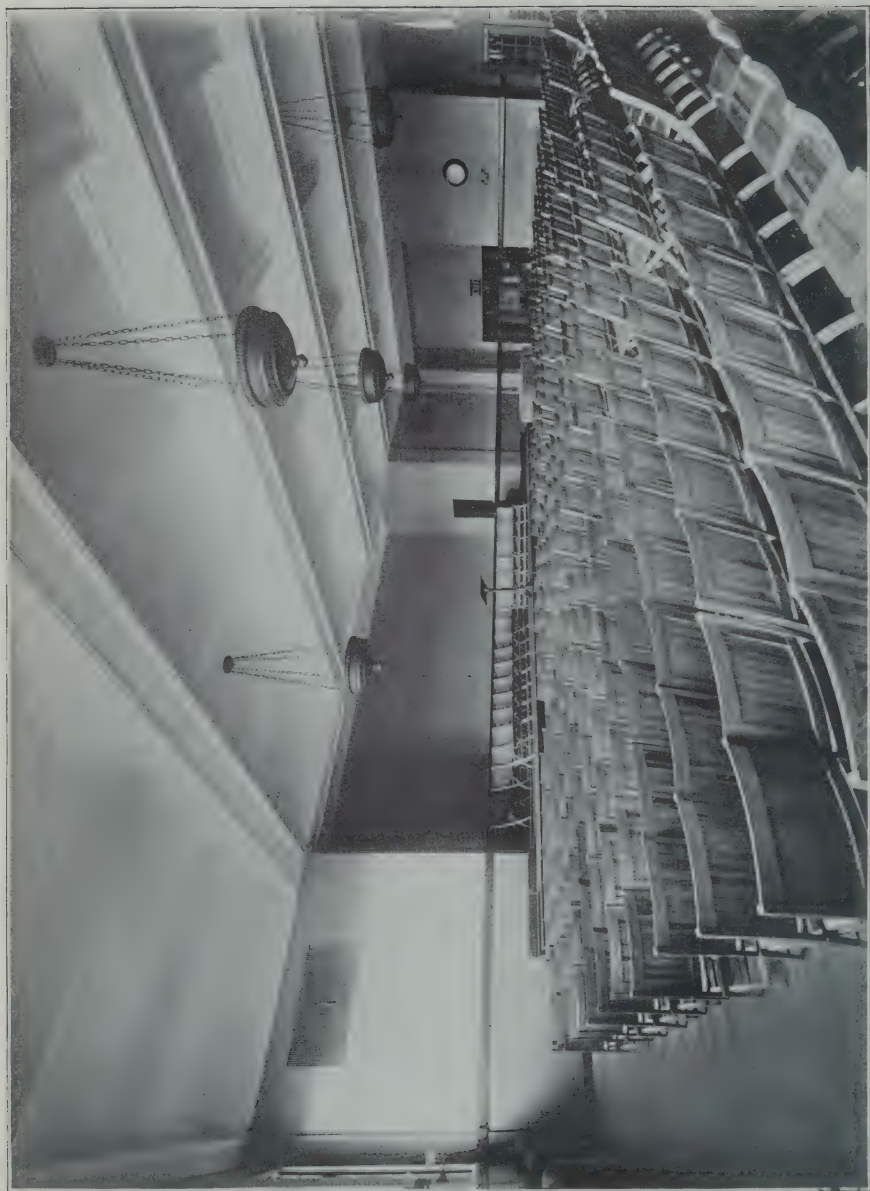
Credits.

Received from sale of North Margin Street School	8,100 00
Received from sale of Old Webb School	3,000 00
Received from sale of house on Longfellow lot	1,250 00
Received from sale of Old Brighton High School	115 00
Received from sale of Bon Homme Richard School	25 00
Received from sale of land adjoining Mechanic Arts High School	25 00
Received from the sale of portable buildings,	1,312 00

Carried forward \$13,157,435 00



MARSHALL SCHOOL ADDITION.



MARSHALL SCHOOL ADDITION — HALL.

<i>Brought forward</i>	\$13,157,435 00
Received as damages for abolition of grade crossing at the Walnut Street School, Minot District	500 00
Received from sale of Old East Boston High School	40,000 00
Received as damages for grading of Geneva avenue, Christopher Gibson School, Christopher Gibson District	899 00
Total	<u>\$13,198,834 00</u>

Expenditures.

Amount expended for sites, erection and furnishing of new buildings	\$11,045,407 73
Amount expended for installation of new sanitation, and the alteration of heating and ventilating systems in old buildings	670,821 81
Amount expended for administration expenses	296,001 93
Amount expended for erection and furnishing of portable buildings	173,273 43
Amount expended for fire escapes, fire extinguishers, interior fire protection, and fire alarm systems	165,690 51
Amount expended for engineering services	81,516 79
Amount expended for enlarging school yards	192,382 92
	<u>12,625,095 12</u>
Amount unexpended February 1, 1914	<u><u>\$573,738 88</u></u>

II.

The following statement shows the expenditures on account of the above appropriation from February 1, 1913, to February 1, 1914:

Appropriations and credits 1913-14	<u><u>\$1,580,647 75</u></u>
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Brighton High School Annex.

Site	\$100 00
Building	80,720 89
Furnishings	2,357 76
	<u>\$83,178 65</u>
<i>Carried forward</i>	\$83,178 65

<i>Brought forward</i>		\$83,178 65
<i>Boston Industrial School for Boys, Land.</i>		
Site	\$304 70	
Building	2,750 00	
		3,054 70
<i>Brimmer Yard Industrial School for Boys.</i>		
Building	\$135 00	
Furnishings	2,449 81	
		2,584 81
<i>Dorchester High School, Additional Rooms.</i>		
Building		2,399 10
<i>Girls' High Enlargement.</i>		
Building		400 00
<i>High School of Practical Arts.</i>		
Building	\$205,892 55	
Furnishings	6,693 35	
		212,585 90
<i>Mechanic Arts High Extension.</i>		
Furnishings		1,552 46
<i>Public Latin Annex.</i>		
Building	\$94,682 40	
Furnishings	2,495 01	
		97,177 41
<i>Roxbury High Addition.</i>		
Building		4,504 06
<i>Andrews School Enlargement.</i>		
Building	\$53,874 82	
Furnishings	256 10	
		54,130 92
<i>Bennett District Elementary School.</i>		
Building		867 87
<i>Charles Sumner District School.</i>		
Building	\$58,465 41	
Furnishings	2,461 47	
		60,926 88
<i>Elihu Greenwood District, Administration Office.</i>		
Building		60
<i>Carried forward</i>		\$523,363 36

Brought forward \$523,363 36

Emerson District, Elementary School.

Site		\$815 00	
Building		60,549 56	
			61,364 56

*Everett District, Fire Appropriation, New Roof,
Etc.*

Building		\$31,370 23	
Furnishings		1,156 45	
			32,526 68

Franklin District, Elementary School.

Site		\$17,392 58	
Building		62,045 47	
Furnishings		2,332 05	
			81,770 10

H. L. Pierce District, Ellen Richards.

Building		\$8,278 33	
Furnishings		1,807 31	
			10,085 64

Lawrence District, Elementary.

Site		\$18,028 90	
Building		1,250 00	
			19,278 90

Lewis District, Lewis School.

Building			167 00
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Longfellow District, Elementary.

Building		\$6,935 82	
Furnishings		1,023 53	
			7,959 35

Lyman District, U. S. Grant School.

Site		\$4,920 58	
Building		708 64	
Furnishings		34 00	
			5,663 22

Mary Hemenway District.

Site		\$4,553 60	
Building		3,139 60	
Furnishings		105 50	
			7,808 70

Carried forward \$749,987 51

<i>Brought forward</i>		\$749,987 51
<i>Mary Lyon District, E. P. Tileston Addition.</i>		
Building		10,892 79
<i>Mary Lyon District, Elementary, M. A. Baker.</i>		
Building	\$14,259 55	
Furnishings	1,044 22	
		15,303 77
<i>Mary Lyon District, Jones's Field.</i>		
Site		50 00
<i>O. W. Holmes District, Marshall Addition.</i>		
Building	\$59,408 88	
Furnishings	2,512 56	
		62,021 44
<i>O. W. Holmes District, Lower Elementary.</i>		
Building		41,900 55
<i>Phillips Brooks District, John Winthrop.</i>		
Building	\$270 06	
Furnishings	37 17	
		307 23
<i>Phillips Brooks, Benedict Fenwick.</i>		
Building	\$122 43	
Furnishings	1,031 85	
		1,424 28
<i>Phillips Brooks District, Elementary.</i>		
Site	\$104 70	
Building	51 52	
		156 22
<i>Prince School Enlargement.</i>		
Building	\$102 26	
Furnishings	1,525 70	
		1,627 96
<i>R. G. Shaw, Elementary.</i>		
Building	\$46 02	
Furnishings	557 60	
		603 62
<i>Roger Wolcott District, William Bradford.</i>		
Building	\$185 47	
Furnishings	169 17	
		354 64
<i>Carried forward</i>		\$884,630 01

Brought forward \$884,630 01

Samuel Adams District.

Building	\$2,321 00	
Furnishings	40 00	
		2,361 00

Samuel Adams School, Additional Story.

Building	26,447 93
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Trade School for Girls, Enlargement.

Site	\$14,750 00	
Building	7,910 09	
		22,658 09

Warren District, Administration Office.

Building	\$3,701 57	
Furnishings	110 47	
		3,812 04

Wells District, Elementary.

Site	354 00
----------------	--------

Bartlett Street, Extension of Yard.

Building	173 75
--------------------	--------

Edward Everett School, Extension of Yard.

Building	155 30
--------------------	--------

Hyde Park High School, Extension of Yard.

Site	25 00
----------------	-------

Normal School, Extension of Yard.

Building	25 80
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Quincy School, Extension of Yard and Office.

Building	\$28 52	
Furnishings	155 92	
		184 44

Samuel Adams School, Preparation.

Building	427 50
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Tyler Street, Extension of Yard.

Site	16,771 26
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<i>Carried forward</i>		\$958,026 12
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<i>Brought forward</i>		\$958,026 12
<i>William Bacon School, Extension of Yard.</i>		
Site	\$10,100 00	
Building	13 15	
		10,113 15
<i>William E. Russell School, Extension of Yard.</i>		
Site		60 00
<i>Fire Protection.</i>		
Automatic door openers		225 00
<i>Administration Expenses.</i>		
Salaries of employees	\$32,044 10	
Rental of offices	2,200 00	
Automobile care and main- tenance	2,508 54	
Printing and advertising	162 68	
Stationery	114 13	
Blueprint paper	252 80	
Photo supplies	34 05	
Supplies	875 09	
Services	11 33	
Furnishings	200 85	
Miscellaneous	81 03	
		38,484 60
		\$1,006,908 87
Amount voted for and set aside, but not expended to date for sites, construction and furnishing of new buildings, administration expenses, fire protection and enlarging school yards		
	\$566,244 64	
Balance unappropriated	7,494 24	
		573,738 88
		<u>\$1,580,647 75</u>
Elementary schools		
	\$560,762 18	
High schools		
	407,437 09	
Administration expenses		
	38,484 60	
Fire protection		
	225 00	
		<u>\$1,006,908 87</u>
Amount received from rents, sale of old build- ings, damages, etc.		
		<u>\$899 00</u>

APPENDIX II.

APPROPRIATION FOR REPAIR AND ALTERATION
WORK, NEW EQUIPMENT, FURNITURE (NEW
AND REPAIRS TO OLD), RENTS AND TAXES,
AND EXPENSES OF THE COMMISSION.

I.

GENERAL STATEMENT.

During the year February 1, 1913, to February 1, 1914, the following sums were expended by the Schoolhouse Department for repair and alteration work, new equipment, furniture (new and repairs to old), rents and taxes, and expenses of the commission:

February 1, 1913, appropriation	\$536,089 34
---------------------------------	--------------

*Repairs and Equipment.**Carpentry:*

Repairs	\$59,034 21
Alterations	18,765 06
New floors	2,704 69
Flagstuffs	2,268 82
Locksmithing	3,495 43
Hardware	60 82

Furniture:

New	32,657 64
Repairs	23,892 18
New curtains	5,459 00
Curtain repairs	1,073 93
New clocks	552 25
Clock repairs	1,255 50
Gymnasium apparatus	902 93

Blackboards:

New	253 40
Repairs	5,928 54

Carried forward	\$158,304 40
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Brought forward . . . \$158,304 40

Plumbing:

Repairs	25,272 14
Drinking fountains	344 10

Roofing:

Repairs	20,403 65
-------------------	-----------

Painting:

Painting	45,507 38
Glazing	7,672 18

Heating:

Repairs	49,796 00
New boilers	3,965 00
Ventilation	1,389 53
Motors and engines	1,353 38

Masonry:

Repairs	29,554 89
Paving	1,743 82
Catch-basins	12,079 16
Asphalt and concrete	3,463 65
Fire protection	888 69
Grading	1,231 22
Planting	1,521 86
Waterproofing	743 10

Electrical:

Electric light installation	10,887 38
Electric light maintenance	1,443 90
Electric bells and telephone installation	6,046 55
Electric bells and telephone maintenance	2,807 10
Electric clock installation	1,222 80
Electric clock maintenance	1,205 72
Fire alarm installation	17,588 71
Fire alarm maintenance	2,355 92
Gas appliance installation	2,703 81
Gas appliance maintenance	1,468 67
Industrial apparatus installa- tion	1,225 57
Industrial apparatus mainte- nance	787 62
Reflectoscope instruments	2,100 00

Carried forward . . . \$417,077 90

Brought forward . . . \$417,077 90

Miscellaneous:

Iron and wire work . . .	9,117 94
Janitors' supplies . . .	496 10
Care and cleaning . . .	1,986 52
Teaming . . .	2,503 60
Rubber treads and matting . . .	1,514 24
Gypsy moths . . .	630 50
Fire extinguishers . . .	550 29
Fire escapes . . .	18,999 63
Vacuum cleaner installation . . .	457 00
Vacuum cleaner maintenance . . .	353 80
Fire protection . . .	48 00

Administration Expenses.

Salaries, commissioners and clerks, . . .	13,557 14
Salaries, inspectors . . .	20,145 39
Rent of offices . . .	2,200 00
Electric lighting of offices . . .	371 42
Postage . . .	712 45
Printing . . .	1,165 05
Stationery . . .	593 77
Advertising . . .	145 75
Telephone . . .	861 04
Messenger service . . .	21 04
Automobile expenses . . .	8,204 77
Furniture . . .	826 79
Car fares, traveling expenses . . .	2,345 91
Ice . . .	22 00
Boiler insurance . . .	49 06
Sundries . . .	201 20
Subscription . . .	14 50

Total repairs and administration expenses . \$505,172 80

Hired Buildings, Rents and Taxes.

Barham Memorial Church . . .	\$600 00
Beech street lot . . .	125 00
Boylston street, 48 . . .	1,672 68
Boylston street, 480 . . .	116 00
Chambers street, 27 . . .	333 00
Chambers street, 38 (St Andrew's Chapel) . . .	1,080 00
Chambers street, 103 . . .	1,633 00
Dover street, 23 . . .	240 00
Eliot street, Jamaica Plain (Trustees' Building) . . .	420 00

Carried forward . . . \$6,219 68

\$505,172 80

<i>Brought forward</i>	\$6,219 68	\$505,172 80
Florence street, 13	210 00	
Franklin Union	5,592 00	
German Lutheran Church	86 00	
Greenwood Hall, Glenway street, Dorchester	600 00	
Hanson street	712 00	
Hull street, 24	420 00	
Hyde Park Gymnasium	211 00	
Jordan Hall	45 00	
Moon street	3,835 00	
Mechanics Building, Huntington avenue	3,084 52	
North Bennet street, 38	350 00	
North Bennet street, 39	60 00	
Oakland Hall	3 00	
Parmenter street, 20	1,000 00	
Saratoga street, 66	240 00	
Saratoga street, 399, East Boston,	166 67	
Tileston street, 52	600 00	
Tremont street, 168	1,920 00	
Tremont street, 218	205 00	
Tremont street, 563	2,000 00	
Walnut avenue and Walnut park,	700 00	
Washington street, 849	826 67	
Waterford street, 6	180 00	
Waterford street, 11	1,650 00	
Total rents and taxes		30,916 54
Grand total		<u>\$536,089 34</u>

II.

SUBDIVISION OF EXPENDITURES.

Elementary schools	\$368,247 43
Administration and incidental expenses	83,169 18
High schools and special schools	71,713 04
School Committee Building	12,959 69
	<u>\$536,089 34</u>

III.

SUBDIVISION AS TO SCHOOLS.

Aaron Davis	\$7,664 37
Abby W. May	484 76
Abraham Lincoln	1,439 18
Aberdeen	124 45
<i>Carried forward</i>	<u>\$9,712 76</u>

<i>Brought forward</i>	\$9,712 76
Abram E. Cutter	288 02
Adams Street	46 53
Agassiz	2,160 24
Albert Palmer	397 93
Amos Webster	223 79
Andrews	378 65
Asa Gray	1,751 32
Atherton	408 50
Auburn	631 94
Bailey Street	194 59
Baldwin	1,131 13
Benedict Fenwick	1,202 78
B. F. Tweed	319 46
Benjamin Cushing	726 81
Benjamin Dean	806 39
Benjamin Pope	1,322 55
Bennett	1,323 22
Bennett Branch	1,689 15
Bigelow	2,509 20
Blackinton	699 52
Boston Industrial	1,794 41
Bowditch	2,000 63
Bowdoin	1,799 78
Brighton High	3,572 13
Bunker Hill Grammar	1,891 18
Canterbury Street	457 12
Capen	987 34
Central Evening High	29 22
Chapman	1,419 58
Charles Bulfinch	395 74
Charles C. Perkins	583 56
Charles E. Daniels	557 84
Charles Sumner	1,246 69
Charlestown High	1,739 13
Charlestown Evening High	3 50
Chestnut Avenue	179 50
Choate Burnham	1,351 66
Christopher Columbus	2,167 22
Christopher Gibson	1,977 91
Clinch	663 68
Comins	1,995 38
Comins Evening	55 20
Commercial High	2,115 80
Commodore Barry	1,783 83
Common Building, Normal Group	9 00
Copley	5,360 77
Cottage Place	522 95
Cudworth	4,857 88
<i>Carried forward</i>	\$69,443 11

<i>Brought forward</i>	\$69,443 11
Cushman	4,423 12
Cyrus Alger	3,438 97
Damon	2,904 08
Dearborn	1,341 18
Dillaway	1,663 96
Dorchester Avenue	1,618 18
Dorchester High	9,998 18
Drake	1,907 60
Dudley	1,699 75
Dwight	1,173 39
East Boston High	1,788 48
Edward Everett	962 61
Edmund P. Tileston	461 46
Eldridge Smith	639 67
Elihu Greenwood	3,455 73
Eliot	1,066 24
Eliot Evening	57 50
Elizabeth Peabody	517 90
Ellen H. Richards	129 58
Ellis Mendell	1,001 55
Emerson Grammar	1,720 38
English High	3,615 51
Evening Industrial	31 00
Everett Grammar	2,120 41
Everett Primary	10 84
Everett Street	2 05
Fairmount	3,134 23
Farragut	1,153 94
Florence Street	302 42
Frances E. Willard	2,062 55
Francis Parkman	1,336 91
Franklin	3,168 46
Franklin Evening	15 10
Frederic W. Lincoln	3,750 02
Frederic W. Lincoln Evening	192 00
Frederic A. Whitney	226 60
Freeman	271 50
Frothingham	4,791 75
Frothingham Annex	57 83
Gaston	3,229 34
George Bancroft	1,604 29
George Putnam	2,827 30
George T. Angell	182 64
Gilbert Stuart	2,300 11
Girls' High	2,591 98
Girls' High School of Practical Arts	212 55
Girls' Latin	662 92
Glenway	149 94
<i>Carried forward</i>	\$151,416 81

<i>Brought forward</i>	\$151,416 81
Glenway Annex	53 09
Grant	191 06
Hancock	5,370 05
Hancock Annex	111 79
Harbor View Street	348 95
Harris	977 84
Harvard Grammar	6,118 67
Harvard Primary, Brighton.	558 64
Hawes Hall	1,416 99
Heath Street	94 51
Hemenway	505 34
Henry Grew	7,620 15
Henry L. Pierce	8,216 58
Henry Vane	320 99
Hillside	2,294 18
Hobart Street	590 70
Horace Mann	1,562 28
Howard Avenue	294 43
Hugh O'Brien.	1,499 83
Hugh O'Brien Annex	169 99
Hull	283 60
Hyde	709 45
Hyde Park High	5,430 62
Ira Allen	191 22
Jacob Foss	1,389 45
James A. McDonald	308 31
James Otis	932 05
Jefferson	1,098 15
John A. Andrew	2,777 58
John Boyle O'Reilly	890 53
John D. Philbrick	155 22
John Cheverus	2,865 16
John G. Whittier	763 30
John J. Williams	72 25
John L. Motley	668 96
John Winthrop	1,223 44
Joseph Tuckerman	1,396 49
Joshua Bates	1,038 03
Julia Ward Howe	4,788 49
Lafayette	488 05
Lawrence.	2,261 29
Leon street storehouse	548 00
Lewis	2,837 05
Little Em'ly	26 50
Longfellow	2,795 37
Louis Prang	943 10
Louisa M. Alcott	780 81
Lowell	1,312 91

Carried forward \$228,708 25

<i>Brought forward</i>	\$228,708 25
Lucretia Crocker	1,190 88
Lyceum Hall	990 92
Manual Arts Department	5 25
Margaret Fuller	374 70
Marshall	658 97
Martha A. Baker	231 83
Martin	2,287 05
Mary Hemenway	1,506 00
Mather	901 57
Mayflower	2 50
Mayhew	3,026 43
Mechanic Arts High	2,510 27
Miles Standish	1,529 58
Minot	874 02
Mozart	101 50
Mt. Pleasant Avenue	352 94
Mt. Vernon Street	1,484 16
Nahum Chapin	447 49
Nathan Hale	497 52
Nathaniel Hawthorne	884 69
Noble	229 70
Noble Annex	30 93
Norcross	1,828 43
Normal	3,336 70
Oak Square	177 00
Old Agassiz	1,640 15
Old Baker Street	112 05
Old Brighton High	25 00
Old Dearborn	387 70
Old Edward Everett	978 58
Old Gibson	1,435 70
Old Mather	2,456 24
Old Thornton Street	537 70
Oliver Hazard Perry	1,452 13
Oliver Holden	211 61
Oliver Wendell Holmes	1,589 14
Parkman	662 52
Paul Jones	470 18
Paul Revere	1,800 52
Peter Faneuil	552 20
Phillips Brooks	2,945 89
Phillips Brooks Evening	12 40
Phillips Street	1,961 28
Phineas Bates	1,153 36
Pierpont	1,022 09
Plummer	2,122 06
Pormort	412 88
Prescott	2,776 21
<i>Carried forward</i>	\$280,886 87

<i>Brought forward</i>	\$280,886 87
Prescott Annex	14 68
Prince	3,085 57
Public Latin	2,435 05
Quincy	2,324 47
Quincy Evening	1 50
Quincy Street	850 31
Rice	1,797 09
Richard Humphreys	765 83
Robert G. Shaw	1,486 95
Robert Swan	791 05
Roger Clap	477 14
Roger Wolcott	2,118 15
Roxbury Evening Drawing	50 00
Roxbury Evening High	39 00
Roxbury Evening Industrial	144 00
Roxbury High	4,153 96
Samuel Adams	1,221 17
Samuel Dexter	1,081 78
Samuel G. Howe	1,567 14
Samuel W. Mason	2,751 43
Sarah J. Baker	747 44
Sarah J. Baker (Practical Arts High)	147 80
Sarah J. Baker (High School of Commerce)	330 20
Savin Hill Primary	881 35
School Street	147 61
Sharp	1,273 84
Shelter, Fifth Street Playground.	490 00
Sherwin	7,264 56
Shurtleff	1,094 89
Silver street storehouse	1,007 39
Simonds	286 99
Skinner	1,083 98
Smith Street	496 09
Somerset Street	375 17
South Boston High	4,461 66
South Boston Evening High	9 50
Stephen M. Weld	444 80
Stoughton	200 46
Theodore Lyman	1,378 29
Theodore Lyman Evening	120 00
Tappan	400 48
Thomas Gardner	1,500 34
Thomas Gardner Annex	102 35
Thomas N. Hart	3,203 88
Thomas Starr King	1,393 10
Tileston	243 52
Trade School for Girls	3,805 06
Trescott	1,487 27

Carried forward \$342,421 16

<i>Brought forward</i>	\$342,421 16
Tyler Street	327 79
U. S. Grant	1,309 51
Wait	475 04
Walnut Street	1,255 73
Warren	1,652 21
Warren Evening	5 70
Washington	3,996 90
Washington Allston	2,230 97
Washington Allston Annex	527 71
Washington Allston Evening	14 90
Washington Evening	230 40
Washington Street (Forest Hills)	270 35
Washington Street (Germantown)	1,149 15
Way Street	106 28
Weld, Hyde Park	462 79
Wells	1,331 13
Wendell Phillips	18,969 74
West Roxbury High	3,309 01
William Bacon	577 85
William Bradford	1,090 08
William Brewster	634 68
William Brewster Annex	61 49
William C. Bryant	411 65
William E. Endicott	2,013 43
William Eustis	1,405 53
William E. Russell	859 94
William H. Kent	782 12
William Lloyd Garrison	1,868 64
William Wirt Warren	1,038 85
Williams	402 41
Winchell	2,255 82
Winship	458 26
Winthrop Street	165 68
W. L. P. Boardman	427 01
Wyman	592 48
Administration and incidental expenses	83,169 18
Portable buildings (111)	15,269 24
School Committee Building	7,140 44
Bartlett street, No. 33	42 79
Park Street Garage	25 00
Wareham street, No. 11	140 71
Warrenton street, No. 25	326 38
Washington street lot, Brighton	32 75
Old Franklin	3 00

Hired Buildings, Rents, Taxes and Repairs.

Barham Memorial Church	\$623 00
Beech street lot, Roslindale	125 00

Carried forward \$501,989 88

<i>Brought forward</i>	\$501,989 88
Boylston street, No. 48	1,680 93
Boylston street, No. 480	116 00
Chambers street, No. 27	565 60
Chambers street, No. 38 (St. Andrew's Chapel),	1,318 95
Chambers street, No. 103	1,785 17
Dover street, No. 23	240 00
Eliot street, Jamaica Plain (Trustees' Building),	420 00
Florence street, No. 13	210 00
Franklin Union	5,597 00
German Lutheran Church	86 00
Greenwood Hall	616 90
Hanson street, No. 1	1,181 82
Hull street, No. 24	606 68
Hyde Park Young Men's Christian Association,	211 00
Mechanics Building	3,331 71
Moon street	4,553 96
North Bennet street, No. 38	616 64
North Bennet street, No. 39	160 92
Oakland Hall	3 00
Parmenter street, No. 20	1,032 02
Saratoga street, No. 66	256 19
Saratoga street, No. 399	186 47
Tileston street, No. 52	600 00
Tremont street, No. 168	2,281 77
Tremont street, No. 218	408 50
Tremont street, No. 563	2,518 76
Walnut avenue kindergarten	741 12
Washington street, No. 849	826 67
Waterford street, No. 6	180 00
Waterford street, No. 11	1,765 68
Total	<u><u>\$536,089 34</u></u>

IV.

STATEMENT OF INCOME.

Received from sale of old furniture, etc.	<u><u>\$507 76</u></u>
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APPENDIX III.

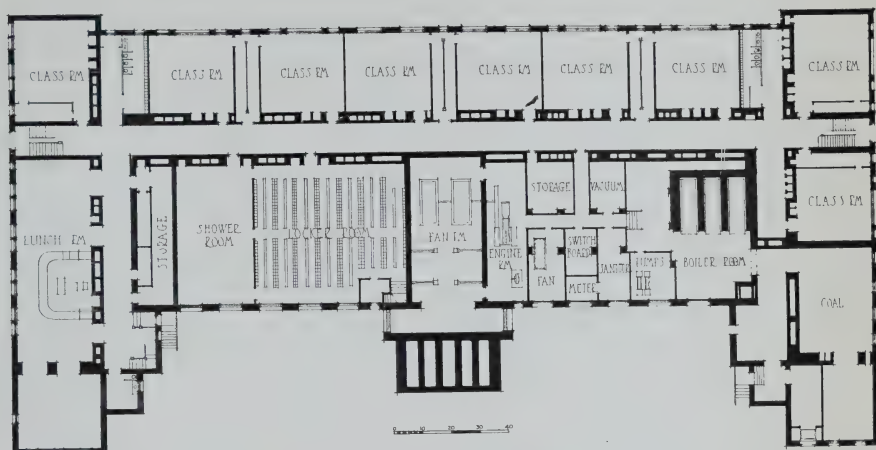
APPROPRIATION HIGH SCHOOL OF COMMERCE.

Appropriation 1909-10	\$50,000 00
Appropriation 1910-11	300,000 00
Appropriation 1911-12	250,000 00
	\$600,000 00
Site	\$29,149 67
Architect's services	29,083 52
	58,233 19
<i>Balance of appropriation January 31, 1914 .</i>	<u><u>\$541,766 81</u></u>

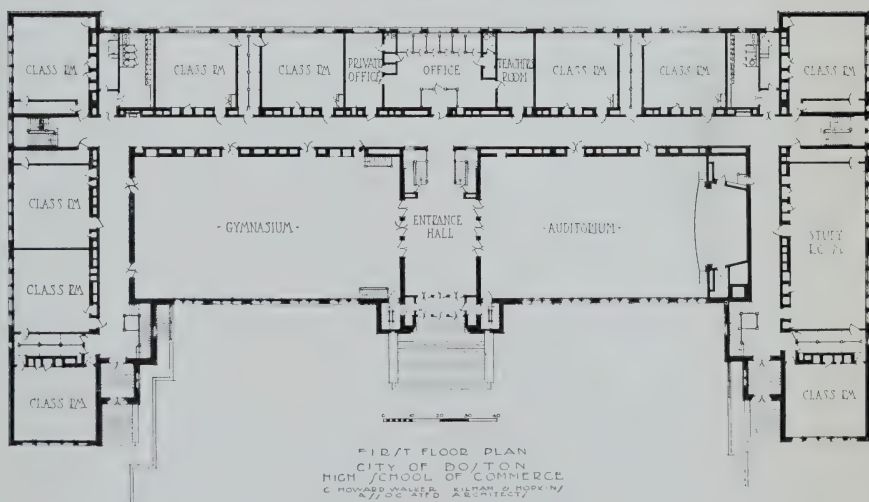
HIGH SCHOOL OF COMMERCE, BOSTON - AVENUE LOUIS PASTEUR.



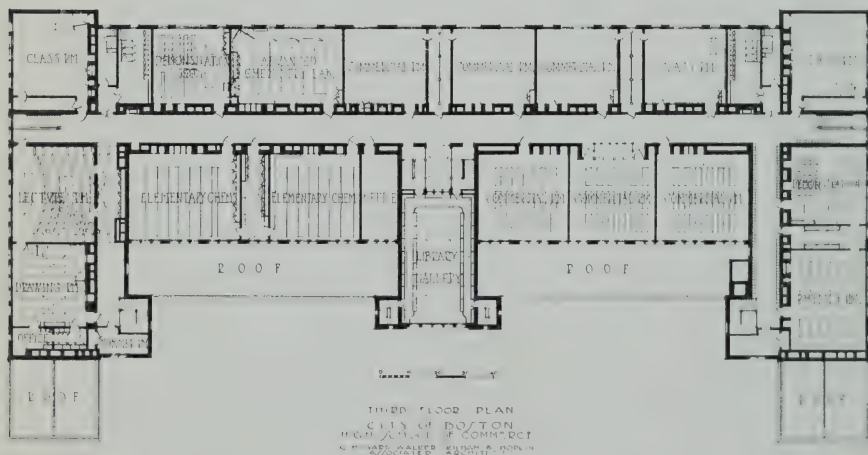
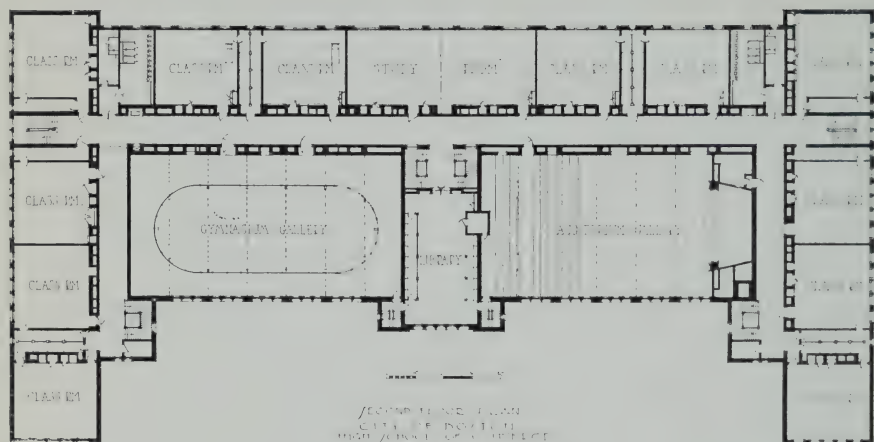
C. HOWARD-WALKER { ASSOCIATED
KILHAM & HOPKINS { ARCHITECTS



BASEMENT FLOOR PLAN
CITY OF BOSTON
HIGH SCHOOL OF COMMERCE
© HOWARD WALKER, ALFRED A. HOPKIN
ARCHITECTS



FIRST FLOOR PLAN
CITY OF BOSTON
HIGH SCHOOL OF COMMERCE
© HOWARD WALKER, ALFRED A. HOPKIN
ARCHITECTS



APPENDIX IV.

HIRED BUILDINGS.

I.

Rooms in the following buildings have been hired for school purposes; rents, taxes, water rates, heating, lighting and janitors' expenses paid for the same, amounting to \$30,916.54 during the year from February 1, 1913, to February 1, 1914.

For	Location.	Remarks.
Continuation School.....	Young Men's Christian Union Building, 48 Boylston street.	Rent per annum \$2,100, from Sept. 11, 1912, including heat, light and janitor's service.
English High School.....	Tremont street, 563.....	Rent per annum \$2,000, including heat, light and janitor's service.
English High School.....	Franklin Union, Berkeley and Appleton streets.	Rent per annum \$4,900, from Sept. 16, 1912, including heat and janitor's service.
Emerson District, Primary Class,*	Saratoga street, 399.....	Rent per annum \$300, not including heat or janitor's service.
Eliot District, two special classes,	Hull street, 24.....	Rent per annum \$420, City to furnish heat and janitor's service.
Eliot District, special class.....	North Bennet street, 38....	Rent per annum \$420, including heat and light.
Eliot District, special classes.....	North Bennet street, 39....	Rent per annum \$720, including heat, light, janitor and water.
Eliot District, Continuation School.	Tileston street, 52.....	Rent per annum \$600, including heat, light and janitor's service.
E. B. Tileston District.....	Oakland Hall.....	Use for graduation exercises, June 20, 1913. Rent for same \$3.
Franklin District, Kindergarten,*	Dover street, 23.....	Rent per annum \$480, including heat, light and janitor's service.
Franklin District, Cooking Room,	Hanson street, 1.....	Rent per annum \$744, including heat and janitor's service.
George Putnam District, Kindergarten.	Walnut avenue.....	Rent per annum \$720, including heat and janitor's service.

* Vacated during the year.

HIRED BUILDINGS.—*Continued.*

For	Location.	Remarks.
Girls' High School.....	Jordan Hall, Huntington avenue.	Used for graduation exercises June 19, 1913. Rent for same \$45.
Hancock District.....	Moon street.....	Rent per annum \$4,800, including heat and janitor's service.
Hancock District, Grammar and Special Classes.	Parmenter street, 20.....	Rent per annum \$1,000, including heat, light and janitor's service.
Horace Mann District, Pre-vocational Class.*	Boylston street, 480.....	Rent per annum \$240, including heat and elevator service.
High School of Commerce *.....	Massachusetts Charitable Mechanics Association, Mechanics Building.	Rent per annum \$6,000, from Aug. 1, 1909, including heat, City to pay water rates.
Hyde Park High School.....	Young Men's Christian Association Gymnasium.	Rent per annum \$300, includes all expenses.
John A. Andrew District.....	Barham Memorial Church, corner Dorchester and Vinton streets, South Boston.	Rent per annum \$600, including heat and janitor's service.
Longfellow District, Primary Classes.*	Beach street, Phineas Bates Portable Building, 12.	Rent per annum \$125, for use of land only.
Manual Training School.....	Eliot street, Jamaica Plain..	Rent per annum \$420, from Feb. 1, 1911, including heat and janitor's service.
O. W. Holmes District, Kindergarten Class.	Greenwood Hall, Glenway street, Dorchester.	Rent per annum \$600, including heat, light and janitor's service.
Quincy District, Primary Class*..	Florence street, 13.....	Rent per annum \$420, including light, heat, water and janitor's service.
School Committee *.....	Washington street, 849, storage space as desired.	Rent per annum \$600, from Dec. 20, 1912, includes all expenses.
School Committee.....	Waterford street, 6.....	Rent per annum \$180.
School Committee.....	Waterford street, 11.....	Rent per annum \$1,650, including heat, use of elevator and water tax.
School Committee.....	Tremont street, 168, fifth floor.	Rent per annum \$1,920, including heat, City to furnish janitor's service.
School Committee.....	Tremont street, 218.....	Rent per annum \$3,020, including heat, light and water service.
U. S. Grant District, Special Class,	Saratoga street, 66.....	Rent per annum \$240, City to furnish janitor's service, heat, light and water.
Washington District, Special and Ungraded Class.	Chambers street, 103.....	Rent per annum \$1,620, from Oct. 10, 1907, including heat and janitor's service.

* Vacated during the year.

HIRED BUILDINGS—*Concluded.*

For	Location.	Remarks.
Wells District, Primary Class. . . .	Chambers street, 27.	Rent per annum \$800, including heat, light, janitor and water.
Wells District, Kindergarten and Grammar Classes.	Chambers street, 38.	Rent per annum \$1,080, including heat, janitor and water rates.

II.

SUBDIVISION OF EXPENDITURES.

Amounts paid from appropriation for rents and taxes for each hired building during the year 1913-14:

Barham Memorial Church	\$600 00
Beech street lot *	125 00
Boylston street, 48	1,672 68
Boylston street, 480 *	116 00
Chambers street, 27	333 00
Chambers street, 38 (St. Andrew's Chapel)	1,080 00
Chambers street, 103	1,633 00
Dover street, 23 *	240 00
Eliot street, Jamaica Plain (Trustees' Building)	420 00
Florence street, 13 *	210 00
Franklin Union	5,592 00
Greenwood Hall	600 00
Hanson street, 1	712 00
Hull street, 24	420 00
Hyde Park Gymnasium	211 00
Jordan Hall	45 00
Mechanics Building *	3,084 52
Moon street	3,835 00
North Bennet street, 38	350 00
North Bennet street, 39	60 00
Oakland Hall	3 00
Parmenter street, 20	1,000 00
Saratoga street, 66	240 00
Saratoga street, 399 *	166 67
Tileston street, 52	600 00
Tremont street, 168	1,920 00
Tremont street, 218	205 00
Tremont street, 563	2,000 00
Walnut avenue	700 00
Washington street, 849	826 67
Waterford street, 6	180 00
Waterford street, 11	1,650 00
West Newton street, German Lutheran Church	86 00

\$30,916 54

* Vacated during the year.

APPENDIX V.

Table Showing Cost of Buildings, Cost per Cubic Foot, Children Accommodated and Cost per Pupil.

NAME OF SCHOOL BUILDING.	Grade.	Building, Heating, Plumbing and Electrical Contracts.	Total Cost of Building.	PERCENTAGE CONTRACTS BEAR TO TOTAL COST OF BUILDING.				Cubical Contents.	Cost per Cubic Foot.	PROPORTION CONTRACTS BEAR TO COST PER CUBIC FOOT.				Cubic Feet.	Children Accommodated.	Cost per Pupil.
				Bldg.	Heat.	Plumb.	Elec.			Bldg.	Heat.	Plumb.	Elec.			
Marshall.	P.	B., \$106,516 75 H., 9,483 00 P., 5,197 00 E., 3,270 90	\$124,467 65	Per Ct. 85	Per Ct. 8	Per Ct. 4	Per Ct. 3		Cents. 24	Cents. 20	Cents. 2	Cents. 1	Cents. 1	37,000	700	\$177 81
William E. Russell.	G.	B., \$158,189 52 H., 15,132 40 P., 9,580 29 E., 5,622 35	188,524 56	84	8	5	3		21	17	2	1	1	50,000	900	209 47
Farragut.	P.	B., \$127,262 98 H., 12,432 00 P., 6,821 45 E., 4,010 00	150,526 43	85	8	4	3		23	19	2	1	1	47,000	700	215 04
Paul Jones.	P.	B., \$95,095 75 H., 10,376 00 P., 5,324 00 E., 3,574 60	114,370 35	83	9	5	3		22	18	2	1	1	36,000	700	163 39
Ellis Mendell.	P.	B., \$103,569 20 H., 9,625 04 P., 5,658 11 E., 3,414 85	122,267 20	85	8	4	3		24	20	2	1	1	43,000	600	203 78
Jefferson.	G.	B., \$182,261 94 H., 16,927 15 P., 6,449 90 E., 5,251 50	210,890 49	86	8	3	3		24	20	2	1	1	45,000	950	221 99
Washington.	G.	B., \$293,661 16 H., 28,305 94 P., 21,417 05 E., 12,157 45	325,541 60	82	7	7	4		25	20	2	2	1	43,000	1,500	217 03

Christopher Columbus.	P.	B., \$136,966 08 H., 16,244 00 P., 15,519 00 E., 4,783 00	79	9	9	3	727,068	23	18	2	2	1	30,000	1,200	144 59
John Boyle O'Reilly.	P.	B., \$95,712 50 H., 10,227 00 P., 4,040 00 E., 2,839 50	85	9	4	2	430,248	25	21	2	1	1	32,000	700	161 20
Oliver Hazard Perry.	G.	B., \$118,497 38 H., 17,621 50 P., 5,094 00 E., 4,932 75	81	12	4	3	612,351	24	19	3	1	1	44,000	700	208 78
Mather.	G.	B., \$241,098 44 H., 27,807 00 P., 11,645 50 E., 8,782 05	83	10	4	3	1,353,831	21	17	2	1	1	42,000	1,600	180 83
Thomas Gardner.	G.	B., \$113,769 15 H., 15,994 04 P., 6,038 00 E., 4,466 38	81	12	4	3	735,573	19	15	2	1	1	52,000	700	200 38
Oliver Wendell Holmes.	G.	B., \$159,563 85 H., 21,930 18 P., 8,037 00 E., 6,116 99	81	12	4	3	991,609	20	16	2	1	1	41,000	1,200	163 04
Samuel W. Mason.	P.	B., \$99,527 64 H., 10,447 00 P., 4,990 00 E., 3,360 00	84	9	4	3	438,223	27	23	2	1	1	31,000	700	169 03
Dearborn.	G.	B., \$182,240 82 H., 20,874 00 P., 8,929 50 E., 5,087 00	84	9	4	3	980,100	22	18	2	1	1	47,000	1,050	206 66
John Greenleaf Whitnier, ...	P.	B., \$61,033 55 H., 7,340 70 P., 3,351 00 E., 2,590 90	82	10	5	3	325,051	23	19	2	1	1	32,000	500	149 47

Table Showing Cost of Buildings, Cost per Cubic Foot, Children Accommodated and Cost per Pupil.—Continued.

NAME OF SCHOOL BUILDING.	Grade.	Building, Heating, Plumbing, and Electrical Contracts.	Total Cost of Building.	PERCENTAGE CONTRACTS BEAR TO TOTAL COST OF BUILDING.				Cubical Contents.	Cost per Cubic Foot.	PROPORTION CON- TRACTS BEAR TO COST PER CUBIC FOOT.				Cubic Feet, Class-room.	Children Accommodated.	Cost per Pupil.
				Bldg.	Heat.	Plumb.	Elec.			Bldg.	Heat.	Plumb.	Elec.			
James Otis.....	P.	B., \$90,867 00	\$107,818 00	84	8	4	4	411,645	26	Cents.	22	2	1	34,000	600	\$179 70
		H., 8,767 00														
		E., 4,889 00														
Joseph Tuckerman.....	P.	E., 3,295 00	77,423 25	80	11	5	4	330,171	23	Cents.	18	3	1	33,000	500	154 85
		B., \$61,875 79														
		H., 8,422 00														
Sarah J. Baker.....	P.	P., 4,226 70	161,194 23	81	11	5	3	702,384	23	Cents.	18	3	1	29,009	1,200	134 32
		E., 2,898 76														
		B., \$130,016 23														
William E. Endicott....	P.	H., 18,673 00	79,057 77	82	11	4	3	348,883	23	Cents.	18	3	1	35,000	500	158 11
		P., 7,625 00														
		E., 4,880 00														
Nathaniel Hawthorne...	P.	B., \$64,745 25	67,912 07	80	11	5*	4	281,305	24	Cents.	19	3	1	31,000	450	159 92
		H., 7,931 00														
		E., 2,693 61														
Charlestown High.....	H.	B., \$54,682 82	296,055 79	86	6	5	3	1,267,608	23	Cents.	19	2	1		540	548 25
		H., 7,518 00														
		P., 3,100 00														
		E., 2,611 25														
		B., \$253,157 94														
		H., 18,711 25														
		P., 13,970 00														
		E., 10,216 00														

[illegible]

Table Showing Cost of Buildings, Cost per Cubic Foot, Children Accommodated and Cost per Pupil.—Continued.

NAME OF SCHOOL BUILDING.	Grade.	Building, Heating, Plumbing and Electrical Contracts.	Total Cost of Building.	PERCENTAGE CONTRACTS BEAR TO TOTAL COST OF BUILDING.				Cubical Contents.	Cost per Cubic Foot.	PROPORTION CON- TRACTS BEAR TO COST PER CUBIC FOOT.				Cubic Feet, Class-room.	Children Accommodated.	Cost per Pupil.
				Bldg.	Heat.	Plumb.	Elec.			Bldg.	Cents.	Heat.	Cents.	Plumb.	Elec.	
William Lloyd Garrison, C.		B., \$51,950 30	\$66,151 48	79	10	6	5	275,640	24	20	2	1	1	27,564	452	\$146 35
		H., 6,688 00														
		P., 3,823 18														
Girls' High Addition, H.		E., 3,690 00	114,462 59	84	9	3	4	522,018	22	18	2	1	1		400	286 16
		B., \$97,396 70														
		H., 9,716 50														
Samuel Adams, G.		P., 3,274 39	107,518 34	79	11	5	5	481,016	22	18	2	1	1	34,358	640	167 99
		E., 4,075 00														
		B., \$84,533 84														
Lafayette *, P.		H., 11,701 50	62,804 24	82	8	6	4	220,000	28	23	2	2	1	27,500	352	478 42
		P., 5,668 00														
		E., 5,595 00														
John Lothrop Motley, P.		B., \$51,234 56	22,510 25	81	10	6	3	99,445	23	18	2	1	1	24,861	176	127 89
		H., 5,321 34														
		P., 3,544 84														
Charles Bulfinch, P.		E., 2,703 50	78,925 73	82	9	5	4	365,368	22	18	2	1	1	30,447	540	146 16
		B., \$18,395 25														
		H., 2,310 00														
John Winthrop, G.		P., 1,205 00	110,673 54	78	12	5	5	601,047	18	14	2	1	1	37,565	728	152 02
		E., 600 00														
		B., \$64,545 73														
		H., 6,980 00														
		P., 3,900 00														
		E., 3,500 00														
		B., \$87,073 54														
		H., 13,500 00														
		P., 5,300 00														
		E., 4,800 00														

Edmund P. Tileston.....	G.	B., \$49,760 26 H., 6,049 50 P., 3,450 50 E., 3,122 55	79	10	6	5	21	17	2	1	1	37,377	364	171 38
George T. Angell.....	P.	B., \$45,153 50 H., 5,000 00 P., 2,900 00 E., 2,101 00	81	9	6	4	26	21	2	2	1	26,095	352	156 69
Ulysses S. Grant.....	G.	B., \$92,797 91 H., 13,722 05 P., 5,451 13 E., 4,538 00	78	12	5	5	19	15	2	1	1	32,898	828	140 71
Lewis.....	G.	B., \$85,416 29 H., 12,600 00 P., 4,600 00 E., 5,474 00	80	11	4	5	17	13	2	1	1	37,775	778	138 93
Benedict Fenwick.....	P.	B., \$49,356 45 H., 8,150 00 P., 3,331 00 E., 2,154 00	79	13	5	3	19	15	2	1	1	26,869	534	117 76
William Bradford.....	P.	B., \$32,638 04 H., 5,987 00 P., 2,700 00 E., 1,504 00	76	14	6	4	17	13	2	1	1	31,375	364	117 34
Roxbury High Annex....	H.	B., \$60,354 12 H., 8,864 24 P., 4,940 80 E., 5,498 79	76	11	6	7	19	15	2	1	1	.....	200	398 29
Ellen H. Richards.....	P.	B., \$33,460 15 H., 6,600 00 P., 3,384 50 E., 1,145 11	75	15	8	2	19	14	3	1	1	28,637	364	122 50
Mozart.....	P.	B., \$17,690 00 H., 2,870 00 P., 1,816 00 E., 515 00	77	13	8	2	21	16	3	1.6	.4	27,133	160	143 07

NOTE.—Since 1909 rated number of pupils and cost per pupil are figured by actual seating capacity of building according to size of class-rooms. See Appendix XV. for date.

*Cost to February 1, 1914.

Table Showing Cost of Buildings, Cost per Cubic Foot, Children Accommodated and Cost per Pupil.— *Concluded.*

NAME OF SCHOOL BUILDING.	Grade.	Building, Heating, Plumbing and Electrical Contracts.	Total Cost of Building.	PERCENTAGE CONTRACTS BEAR TO TOTAL COST OF BUILDING.				Cubical Contents.	Cost per Cubic Foot.	PROPORTION CON- TRACTS BEAR TO COST PER CUBIC FOOT.				Cubic Feet, Class-room.	Children Accommodated.	Cost per Pupil.
				Bldg.	Heat.	Plumb.	Elec.			Cents.	Cents.	Cents.	Elec.			
Martha A. Baker	P.	B., \$19,474 91	\$24,557 91	79	11	8	2	127,650	19	15	2	1.6	.4	31,912	176	\$139 53
		H., 2,828 00														
		P., 1,853 00														
John J. Williams	P.	E., 402 00	69,138 44													
		B., \$53,538 44		77.5	12.3	5.9	4.3	303,295	23	17.8	2.8	1.4	1	25,276	528	130 94
		H., 8,500 00														
John D. Philbrick †	P.	P., 4,100 00	59,063 75													
		E., 3,000 00														
		B., \$43,822 25		73.4	13.4	6.7	6.5	305,209	19	13.9	2.5	1.4	1.2	38,151	358	166 66
High School of Practical Arts.	H.	H., 8,000 00	300,850 67													
		P., 4,020 90														
		E., 3,820 60														
Emerson District *	P.	B., \$240,190 20	70,735 20	79.8	7.6	4.8	7.8	1,222,909	25	19.9	1.9	1.2	2		1,000	300 85
		H., 23,390 00														
		P., 14,923 69														
Oliver Wendell Holmes District.*	P.	E., 22,346 78	59,759 05													
		B., \$52,905 20		74.8	13.6	6.8	4.8	338,832	21	15.8	2.7	1.5	1	28,236	534	132 46
		H., 9,600 00														
		P., 4,800 00														
		E., 3,430 00														
		B., \$44,798 05		74.9	14.4	5.9	4.8	272,303	22	16.5	3.2	1.3	1	27,230	410	145 75
		H., 8,625 00														
		P., 3,500 00														
		E., 2,836 00														

† Contains Assembly Hall.

* Cost to February 1, 1914.

APPENDIX VI.

ARCHITECTS' SERVICES.

Every architect employed by the Schoolhouse Commissioners of the City of Boston as the Architect for erecting a building is to perform the duties hereinafter provided.

SECTION 1.—*The Board*.—(a.) Is to furnish the Architect with the requirements and information for the design and construction of the building for which he is the Architect, and give the approximate cubical contents and proposed cost per cubic foot thereof;

(b.) Is to provide the services of domestic engineers to confer with the Architect during the preparation of preliminary studies, and when these are accepted by the Board to advise the Architect in the details of their work, and make the necessary working drawings and specifications for (excepting plumbing), and have the direction of, the plumbing, heating, ventilating and electric work for the building, said work being hereinafter designated as the domestic engineering;

(c.) Is to give the grade and lines of streets and adjoining lots;

(d.) Is to give all information regarding the lot, and to furnish Architect with full information relating to the above, the sewer, water, gas and electric service, and to the rights, restrictions and boundaries of the lot on which the building is to be constructed.

SECT. 2.—*The Architect*.—(a.) Is to consult and advise with the Board and make such preliminary studies as will acquaint the Board with the contemplated arrangement, design, construction and cubical contents of the building, and enable it to agree with the Architect upon a definite limit of cost therefor, and to accept said preliminary studies as the basis of working drawings and specifications;

(b.) Is to make upon the basis of said preliminary studies one complete set of working drawings in ink on tracing cloth, floor and framing plans, sections and elevations at one-eighth scale, plumbing drawings and such detail drawings on a larger scale as are necessary to explain the specifications;

(c.) Is to furnish one complete typewritten set of specifications according to department form for everything, including plumbing, to be furnished or done in constructing the building, except the domestic engineering, and is to revise and correct the printer's proofs;

(d.) Is to loan to the Board, to make blueprints therefrom, the said set of working drawings;

(e.) Is to restudy, and if necessary redraw, without charge, any or all of said drawings and specifications, if, owing to an unwarranted departure from the approved preliminary studies or to a needlessly extravagant or elaborate interpretation of them in said drawings and specifications, the lowest bid for doing the work in accordance therewith overruns the limit of cost agreed upon by the Architect and the Board;

(f.) Is, upon the signing of contract, to deliver to the Board, to remain their property, two sets of blueprints, mounted on cloth, taken from the said set of working drawings, a perspective drawing of the exterior of the building and such floor plans as the Board may request, suitable for reproduction, and at the conclusion of the work a complete set of working drawings on tracing cloth, either the set previously referred to or a copy therefrom, which shall be corrected to agree with and embody all changes made during construction;

(g.) Is to make application for a building permit to the Building Department on a form signed by the chairman of the Board, and deliver to the Building Department two sets of such blueprints from the said set of working drawings as may be required by the Building Department (the Board furnishing specifications to the Building Department);

(h.) Is to have general supervision of the domestic engineering and be the Architect of all other work to be done under any written contract for the construction of the building, and render the full usual Architect's services and supervision for such other work;

(i.) Is, in the form prescribed by the Board, to make all estimates and allowances for payments under any contract in which he is made the Architect of the work, and such estimates for the domestic engineering are to be accompanied by certificates of said engineers as to their accuracy;

(j.) Is to advise with the Board on any changes in the building contemplated by the Board, and is to order changes when required by the Board so to do;

(k.) Is to cause the drawings and specifications furnished by him to conform to all regulations of law and public authorities, and to be in accordance with established methods of building construction, faithfully carry out all the foregoing provisions, use all proper knowledge, skill and care therein, and be accountable for any failure so to do.

SECT. 3.—(a.) The city, as full compensation for the services aforesaid, is to pay the Architect 3 per cent upon the cost of the domestic engineering, exclusive of plumbing, and 6 per cent upon the cost of all other work;

(b.) Payments to be made as follows: 3 per cent upon all contracts other than those for domestic engineering is to be paid on the signing of such contracts, and thereafter 3 per cent upon the value of the materials and labor, as specified in each

monthly application for payment under the contract, is to be paid on the filing of the application, until the full payment aforesaid is made, and if any thereof remains unpaid at the completion of the work it is then to be paid. When preliminary studies are completed, the value of the Architect's services to date shall be reckoned one-sixth of the estimated total commission; when working drawings and specifications are ready for contract and if for any reason the signing of contract is delayed, the value of his services to date shall be reckoned at 3 per cent of cost based on allowance for building given by the Board to the Architect. If the Board discontinue the services of the Architect at any intermediate stage the value of his services shall be reckoned proportionately. Five per cent on cost of domestic engineering, exclusive of plumbing, and 10 per cent on other work will be paid to Architects on all changes and alterations made within or to existing buildings. Additions and extensions made outside of such buildings to be regarded as new work and the commission to be reckoned on that basis.

SECT. 4.—When for any reason other than those stated in section 2, paragraph (e), above, the Board shall set aside the whole or any part of an Architect's studies, drawings and specifications while retaining him to prepare corresponding new studies, drawings and specifications for the same school building, the city shall pay the Architect for the work thus set aside a sum not exceeding three times the actual cost of draughting, and the new work shall be paid for on a commission basis, as stated in section 3, above.

SECT. 5.—In the above agreement the term "building" is used to define not only the structure itself but all work in connection with it committed to the Architect by the order of the Board, as fencing, grading, roads, walks, planting, decorative painting and sculptural decoration, including finish and fittings as hereinafter defined in General Information as to Standard Requirements and in Appendices.

APPENDIX VII.

GENERAL INFORMATION AS TO STANDARD REQUIREMENTS FOR SCHOOL BUILDINGS AND YARDS.

YARDS.

(1.) *Grading.*—Grade the yards as determined after consultation with the commissioners.

(2.) *Fences.*—Provide fences, planting, etc., as determined after consultation.

(3.) *Gates.*—Provide the gates in fences inclosing the yards with hasp and staple to receive the Department Standard yard padlock, which will be furnished by the Department outside of the general contract.

(4.) *Play-yards.*—Play-yards located on the sunny side of the building are desired and approximately 30 square feet per pupil should be provided. Play-yards are to be paved with hard-burned bricks, laid flat in sand and sloping at proper grades to catch-basins connecting to sewer.

(5.) *Walks.*—Pave the walks and approaches with hard-burned brick laid flat in sand.

(6.) *Curbs.*—Curbs forming borders may be paved with brick laid on edge. Bull-nose brick may be used for curbs.

(7.) *Sidewalks.*—Sidewalks for public use outside of the lot line and curbs for same are to be included in general contract for building as an allowance.

(8.) *Basement Entrances.*—Separate entrances are to be provided for boys and girls from their respective yards to the play-room. Areas, steps and inclines are to be avoided wherever possible. A separate entrance for janitor to boiler-room may be provided. A proper entrance for coal and exit for ashes should be provided.

(9.) *Driveways.*—Driveways such as for coal and ash teams are to be paved with vitrified pavers laid at the proper pitches, and in cement mortar on a sufficiently thick concrete base.

(10.) *Flagstaff*.—Provide a flagstaff with halliards, truck, etc., complete.

NOTE.—All the above items except as noted to be included in the general building contract.

ELEMENTARY SCHOOLS.

In General.—Elementary schools are subdivided into upper and lower. Lower includes Grades I., II. and III., and are to have 12-inch by 18-inch desks. The buildings for the lower grades are to have besides the class-rooms required, rooms for teachers, nurse, book storage and emergency closets. The upper elementary buildings are to contain Grades IV. to VIII., inclusive, and are to have besides the class-rooms required an assembly hall and rooms for master, teachers, nurse, book storage and emergency closets.

Grades IV., V. and VI. are to have 15-inch by 21-inch desks and Grades VII. and VIII. are to have 16-inch by 23-inch desks.

Desks are to be spaced according to standard seating plan.

THE BUILDING.

The building will be either "Lower Elementary" or "Upper Elementary," as above mentioned. This will be determined by the Commissioners, who will act as an intermediary between architects and the school authorities and committee. Relations between commissioners, architects and contractors to be as defined by a contract. Commissioners are to determine the type of construction of the building.

Orientation.—It is desired to place the building so that each class-room should receive sunlight during some portion of the day.

Setting.—Set the building above grade so that the play-rooms are well lighted and entrances are provided into basement play-rooms as before mentioned. (See Basement Entrances.) Boiler-room floor wash to drain direct to sewer wherever possible.

Heat and Vent Flues.—To be of galvanized iron or masonry, as determined by the commissioners. If of masonry, to have joints neatly struck and the inner surface fairly smooth.

Fireproofing.—The ceiling of boiler-room and coal storage should be fireproof construction if these rooms are placed under class-rooms or corridors. Doors for boiler-room and coal-pocket to be metal covered. Boiler-room to

be self closing. Closets should be provided for electrician as needed for batteries, switches, etc.

A paper burner should be provided in connection with the boiler-room as directed.

Bulletin board and letter box should be included in general contract.

LOWER ELEMEN- This type of building, in addition to the
TARY. foregoing requirements, is to have kindergarten-room where so directed by commissioners.

UPPER ELEMEN- This type of building, in addition to the
TARY. requirements for the lower elementary, should contain an assembly hall with its necessary rooms, and a master's room with waiting-room if so directed. Rooms for cooking, manual training, etc., are to be provided when called for by the commissioners.

SCHOOL-ROOMS. (1.) *Size* will be 23 by 29 for lower and upper elementary grades and not less than 12 feet high in clear. Modification allowable only after consultation with the Board. Desks should be laid out on the preliminary plans. (See drawing.) The School Committee advise, and this Board has adopted, the policy of having a small portion of the rooms in a building, perhaps 10 or 20 per cent, of a size that will seat 50. Every class-room shall be consecutively numbered on the plans to designate it. These numbers to be for the doors, as noted below, and for the annunciator. Other rooms that appear on the annunciator to be named on the plans, as assembly hall, teachers' or master's room, cooking-room, manual training room. The kindergarten shall be counted as a class-room. In high schools, both class and recitation rooms to be numbered, other rooms named.

(2.) *Windows* will be on the long side for left-hand lighting. The glass measured inside the sash shall contain not less than one-fifth of floor area, neither double run of sash nor double glazing nor weather strips will be required, the head square and close to the ceiling; the sill about 2 feet 6 inches from the floor where a gravity indirect system of heating is installed and 2 feet 11 inches where there is to be a plenum system; the windows divided with muntins, no large sheets of glass. Finished with plastered jamb, metal corner bead, without architrave.

(3.) *Doors.*—One to corridor, 3 feet 6 inches by 7 feet, partly glazed, to open out, placed preferably near the teacher's end; (two doors may be desired under certain conditions); brass-plated, ball-bearing steel butts, 4-lever mortise lock, master keyed; cast brass knobs, marble flush thresholds to corridors for first-class construction. Doors to have 2-inch, plain brass numbers, and cardholders, $3\frac{1}{2}$ inches by 5 inches, and hooks to hold open.

(4.) *Floors* will be maple.

(5.) *Walls* will be painted burlap up to top of blackboards, or of tack boards, and above this plaster tinted in water color,—a warm gray green or buff gives the best results,—the blackboards 4 feet high, 2 feet 2 inches from floor in kindergarten, 2 feet 4 inches to 2 feet 6 inches in Grade IV., and 2 feet 8 inches in Grade V. to VIII.; behind the teacher and on the long side. These will be of best black slate $\frac{1}{4}$ inch thick. At end, in place of blackboard, soft wood sheathing with burlap stretched over it with sewed seams for a tack board, to extend from base to the moulding at top of blackboards, to have wood strips to cover tacks. In lower grades a card rack is required above the blackboard only. A picture moulding at top of burlap, and also near ceiling in all rooms. (See drawings.)

(6.) *Ceilings* will be level, plaster tinted a light cream color. Ceiling angles square.

(7.) *Lights.*—Nine chain pendant electric fixtures on three switches. No gas.

(8.) *Heating and Ventilation.*—The inlet for heat about 5 square feet, the outlet for ventilation about 5 square feet.

(9.) *Bookcase.*—Provide a bookcase in any convenient position, about 5 feet 9 inches wide; upper doors fitted with cylinder locks, and latch and knob; drawers fitted with locks and small brass pulls. Lower doors to have knobs and cylinder locks; same lock in each bookcase; all bookcase locks master keyed. (See drawing.) Special equipment for care of books where school is held day and evening is desired, similar to that existing at the Charlestown High School, so that the books of the day pupils will be put away in pigeonholes, leaving the desks free for evening use.

(10.) *Teacher's Closet.*—Provide a small closet for teacher's coat and hat, preferably

opening from the class-room, but allowable from the wardrobe, closet to have about 6 hooks and one shelf.

FRESH-AIR
ROOMS.

The School Committee is responding to the more general demand for fresh-air rooms for children who are anæmic or of tubercular tendencies. At present all that the Board is advising to meet this new demand is that a sunny room, preferably a corner room, be chosen for this work, and that the windows on one or on two sides be made casement, to open out, or as the Board may direct; and that the heat be largely direct, so that the temperature can be quickly raised, if necessary, when the windows are closed. Otherwise these rooms will be the same as other class-rooms.

WARDROBES. (a.) (1.) *Size.*—Wardrobes will adjoin school-rooms and be from 4 feet 6 inches to 5 feet wide in the clear; 6 feet where compartments are used. The Board is to be consulted as to the type of wardrobe, as in certain cases they may prefer the kind used at the Abraham Lincoln School.

(2 and 3.) *Windows and Doors.*—Outside light, two doors, both connecting with school-room, and not to corridor, and having no thresholds. Doors, double swung, 2 feet 6 inches wide, brass double-acting butts, foot and hand plates, hooks or adjustable stops to hold open, ventilation under door farthest from vent.

(4.) *Floors.*—Terrazzo or composition, with border and base for first-class construction. For second-class construction, to have composition floor and base. For all cases, to have a drip gutter for umbrellas.

(5.) *Walls.*—Painted burlap to a height of 7 feet, poles on brass-plated iron brackets with hooks under and pins over, 44 in number; umbrella clips and drip gutter below. (See drawing.) Walls above, plaster, tinted. Height of lower pole, kindergarten, 30 inches from floor; lower grades, 36 inches to 40 inches; upper grades, 44 inches, 48 inches and 52 inches; distance between poles, 8 inches for elementary, 12 inches for high schools. Pins and hooks, 8 inches to 12 inches on centers for elementary and 16 inches to 18 inches for high. Each hook to have a painted number $1\frac{1}{4}$ inches high. An individual compartment is required for each pupil where the Board directs that type.

(6.) *Ceiling*.—Plaster, untinted.

(7.) *Light*.—One lamp. Ceiling outlets, electric. Switch in class-room.

(8.) *Heating and Ventilation*.—Heating, direct. Ventilation, vent duct, $1\frac{2}{3}$ square feet area cross section.

CORRIDORS AND VESTIBULES.

(1.) *Size*.—Not less than 8 feet wide for four rooms on a floor; not less than 10 feet for over four rooms, governed by length, access to stairs, etc.

(2.) *Windows*.—Outside light essential.

(3.) *Doors*.—Main outer doors to open out, heavy butts, standard, master keyed, school lock; lock set to be furnished by the Department but set by the Contractor; door check; heavy hooks to hold open. Vestibule doors open out, heavy butts, pulls, push plates, hooks to hold open, door checks, no locks. Outer doors to basement open out, and fitted with mortise lock with knob on inside only — outside to have a pull. Other hardware as above. All outside doors to be $2\frac{1}{4}$ inches thick, and to be made solid, no veneer.

(4.) *Floors*.—Terrazzo divided into areas not to exceed 80 square feet, by slate strips, and to have terrazzo or marble base for first-class construction. Wood floor and base second-class construction.

(5 and 6.) *Walls and Ceilings*.—A light glazed brick, untinted walls and ceilings. If walls of common brick to have smoothly struck joints and painted; if walls of plaster to have burlap 7 feet high — painted. Put picture moulding at ceiling in corridors.

(7.) *Light*.—Ceiling or short pendant fixtures (electric), 32 candle power each, also gas for emergency in corridors, on stairs, and in vestibules.

(8.) *Heating and Ventilation*.—Heat direct, supplemented by foot warmers on first floor. Ventilation where possible.

(9.) *Sinks and Closets*.—On each floor above the first, one or two 4-foot sinks, with 2 fountains.

STAIRCASES.

(1.) *Number and Arrangement*.—Determined by the Board, and not over 5 feet wide.

(2.) *Material*.—The treads, North River stone on iron string, or concrete construction with granolithic surface for first-class construction; wood for second-class construction. Rails of a simple pattern, easily cleaned; wall

rails are desired. If of wood construction the treads will be furnished by the department, and same to be set by General Contractor.

(3.) *Steps*.—Rise about $6\frac{1}{2}$ or 7 inches, treads about $10\frac{1}{2}$ inches. Rail not less than 2 feet 8 inches on runs and 3 feet on landings.

(4.) *Exits*.—Exits from the lower landings of stairs are desired. These may have emergency bolts where so desired. Fire escapes may be desired when recommended by the Building Department and after consultation with the Board.

SANITARIES.

(1.) *Size*.—General toilet-rooms in basement, in size approximating space for $1\frac{7}{8}$ water-closets for each school-room, *i. e.*, $\frac{5}{8}$ boys and $1\frac{1}{4}$ for girls, and 33 inches of urinal for every school-room, arranged for convenient supervision and circulation. Slate sinks, length from 10 inches per class-room in small buildings to 6 inches per class-room in large buildings, located preferably in the play-rooms. The above refers to mixed schools.

(2.) *Windows*.—Ample outside light; glazed where exposed to view outside with ribbed glass; to have wire guards.

(3.) *Doors*.—The doors arranged “in” and “out,” with spring or door check and stout brass hooks to hold open; glazed with ribbed glass; half doors to water-closets.

(4.) *Floors*.—Asphalt. Boys’ drained to urinals, girls’ to floor wash.

(5.) *Walls*.—Salt-glazed brick or other nonporous inexpensive surface, 7 feet high; above, brick painted.

(6.) *Ceiling*.—Untinted plaster or white-washed concrete. Basement ceiling need not be furred level for first-class construction. For second-class construction ceiling should be plastered.

(7.) *Light*.—Ceiling or short pendant electric fixtures.

(8.) *Heat and Ventilation*.—Heat direct. Ventilation through water-closets and space back of urinals, allow 10 square inches local vent for each water-closet and 8 square inches for each lineal foot of urinal.

PLUMBING FIX- TURES.

(1.) *Water-closets*.—The pupils’ water-closets for elementary schools are wash down closets; siphon action, upper classes, $16\frac{1}{2}$ inches high; lower classes, $13\frac{1}{2}$ inches high.

Teachers' same with raised rear vent $16\frac{1}{2}$ inches high. (See drawing.)

(2.) *Partitions*.—To be $\frac{7}{8}$ -inch V-grooved hard wood sheathing applied vertically, with top and bottom rails of same wood, supported at ends with iron pipe about 8 feet high, tied together and to the wall, to which doors are hung. Back partition of water-closets to be wood sheathing over a 2-foot slate base. Finish of wood (color) to match that of rest of building. (See drawing.)

(3.) *Urinals*.—The urinals will be of slate, floor slab, trough and back, with partitions where requested, flushed automatically from special tank, through $\frac{7}{8}$ -inch perforated pipe, with cold water; vented at bottom into space behind. (See drawing.)

(4.) *Sinks* of black slate, two self-closing cocks, and jet drinking fountains, set 20 inches on centres. A sink is desired for electrician unless there is one near by.

(5.) *Floor Washes* in sanitariums and play-rooms as already mentioned. (See drawing.)

(6.) *Piping*.—(a.) Cast iron must be laid on good footing in basement, clean-outs at every change of direction. Soils and vents exposed as far as possible, no asphaltum, red lead and three coats of paint.

(b.) *Supplies*.—Exposed as far as possible; where covered may be plain brass, elsewhere polished brass; no nickel plate. Hot water for janitor's use in basement, cooking-room, and for master's and teachers' rooms. Supply from boiler and from summer boiler, if any, or from an independent hot water heater. No auxiliary supply wanted for water-closet tanks.

(c.) *Fire Lines*.—In buildings over three stories high, one or more lines of 3-inch pipe if requested by the Board.

PLAY-ROOMS.

All free basement space to be arranged as play-rooms for boys and girls. Walls to be hard-burnt brick and painted. Dust proof granolithic floors, plaster ceilings or white-washed concrete. Basement doors and windows to have wire guards in channel iron frames; guards to be hinged and padlocked. Doors are desired from the play-rooms to the play-yards. Areas at doors are not desired.

MASTER'S AND TEACHERS' ROOMS.

(1.) In each school of the upper grades a room of about 240 square feet for the master, with a water-closet and bowl and a book-

closet adjoining. This room should be near the centre of the building, *i. e.*, on the second floor, in a three-story building. In all schools a room or rooms for teachers, averaging about 300 square feet for ten teachers, with water-closet and bowl. Doors to be clearly marked "Master" or "Teachers" in brass letters and one water-closet and bowl on each floor of six rooms for teachers' emergency.

(2.) Where men as well as women are teachers, a separate room with toilet accommodations for men.

(3.) Opportunity in teachers' rooms for warming luncheon, either gas or electric.

SPECIAL ROOMS.

ASSEMBLY HALLS.

Assembly halls should accommodate from 400 to 800 as the Board may direct. It is not considered necessary to seat the full number of pupils in schools of greater capacity. The floor to be level and of wood like class-rooms, or linoleum. The windows to be fitted with rebated mouldings to take black shades, and so designed as to make the operation of shades practical and simple. (See department standard detail.) The platform should be capable of accommodating one, or, in the large schools, two classes, and should have removable stepped platforms of wood to take the seats. Galleries may be used where the hall is two stories in height. Anterooms near the platform are desirable, and a connection from adjoining class-rooms to the anterooms or directly to the platform. A dignified architectural treatment of the walls and a studied color scheme for walls and ceiling is expected. The lighting, acoustics and exits should be such as belong to a small lecture hall. Artificial lighting to be under control from at least two points, one of which must be near an exit. Electric outlet for 30-ampere projection lantern, 25 feet from curtain. Provide recess in ceiling over platform for spring-rolled curtain 13 feet long. For assembly hall an allowance in cubing is made by the Board of two class-rooms for schools of medium size, that is, about sixteen class-rooms, and four class-rooms for schools of larger size, *i. e.*, over twenty-four class-rooms to represent the added area for this purpose.

MANUAL
TRAINING
ROOMS.

(1.) *Size*.—Room, generally located in basement, if floor can be above grading, should be approximately 900–1,000 square feet, preferably a corner room, and the larger of the two allowed sizes of rooms, and arrangement shown by drawing, for number of benches there given, 25. In elementary schools for boys only 22 benches are sufficient.

If in basement this room is not to be counted as one of the class-rooms.

(2.) *Light*.—The windows should be as near full length as possible and on two sides. Artificial light in chain pendant electric fixtures, one light to every four benches.

(3.) *Floors*.—Of wood.

(4.) *Walls*.—A basement room should be finished as a shop; salt-glazed brick up to 7 feet where exposed, and above blackboard brick walls whitewashed. If above basement, finished as a class-room.

(5.) *Ceilings*.—Like basement.

(6.) *Heating and Ventilation*.—The same as in class-rooms. If in basement provide some direct radiation.

(7.) *Fittings*.—(a.) *Stock-room*.—Stock-room should contain at least 80 square feet, preferably rectangular. Eighteen-inch shelves should run around the room, 5 feet 6 inches and 6 feet 6 inches from the floor.

(b.) *Wardrobes*.—Wall space for 26 double coat and hat hooks, in a separate room.

(c.) *Teachers' Closets*.—Teachers' closet should be small for personal belongings, with shelving and hooks under.

(d.) *Storeroom*.—For finished work and hardware should be fitted with all shelving possible; an area 40 square feet is adequate.

(e.) *Bookcases*.—Like those in class-rooms, 150 capacity.

(f.) *Work-rack*.—About 28 feet long, made in sections, 6 feet 6 inches high and 2 feet deep. The length is to take 24 compartments (equaling the number of benches) and the height the number of divisions that use the room (two each day, five days, outside limit). Compartments to have numbers and letters painted. (For all of these, see drawings.)

(g.) *Sink*.—A 3-foot soapstone sink, with hot and cold water, with drinking fountain if desired.

(h.) *Display Frames*.—Four display frames, size and position as indicated, of burlap over soft wood back, with 2-inch moulding around.

(i.) *Demonstration Steps*.— Demonstration steps are desired.

(j.) *Furniture*.—(Not included in the building contract.) The furniture comprises 25 benches and stools, teachers' desk, table 4 feet by $2\frac{1}{2}$ feet, with unfinished top, 1 desk chair and 2 common chairs, a clock. (See drawing.) Lay these out on preliminary drawings. Lower benches to be set toward the front and nearer the windows.

(k.) *Blackboards*.— Provide about 15 running feet of slate blackboards, 4 feet high.

(l.) *Glue Pot*.— Provide electric or gas connections for same.

COOKING-ROOM. (1.) *Size*.— Should have an area of 900–1,000 square feet, preferably a corner room on top floor, but generally in basement, and the larger of the two allowed sizes of room, and arranged for 24 stations. If in basement this room is not to be counted as one of the class-rooms.

(2.) *Light*.— Windows as in a class-room, if located in a corner, from two sides. Artificial light as in a class-room.

(3.) *Walls*.— Above basement, similar to school-rooms, blackboards, 4 by 10 feet, back of teacher's desk. Walls painted in oils. A basement room may have salt-glazed brick walls up to 7 feet and painted brick above. (See drawings.)

(4.) *Floors*.— The floor to be wood or linoleum, on cement, except space occupied by ranges, which is tiled.

(5.) *Ceilings*.— Ceilings like basement, or, if above basement, like class-rooms.

(6.) *Heat and Ventilation*.— Less heat is required than in a class-room, but the ventilation should be the same, with additional vent from the demonstration ranges. Hoods over ranges if Board so desires.

(7.) *Fittings*.— (a.) *Wardrobes*.— Provision for 24 pupils, double coat and hat hooks in separate lighted closet, and teacher's small closet.

(b.) *Work Benches*, accommodating 24 pupils, fitted with compartment for utensils, bread-board, etc., a Bunsen burner with a hinged iron grille over it, set on aluminum

plate at each station; benches arranged in the form of ellipse, or oblong, with access to centre from two sides; top of pine 24 inches wide; open underneath and supported on pipe standards. One section detached and fitted as a demonstration bench; a clear space of 4 feet all around. Dining table (furnished under another contract) is to be set in centre. (See drawings.) Lay these out on preliminary drawings and include in final drawings and contract.

(c.) *Dresser*.—Ten feet long in 3 sections, 4 adjustable shelves and glazed sliding, or hinged doors at top; one set of 3 drawers and 2 cupboards on lower part. A shelf should be put in each cupboard about 12 inches from top.

(d.) *Fuel-box*.—In 2 compartments, each about 24 inches square and 30 inches deep, with hinged lids; small shelf in one section. Accommodations in the main coal-room for a supply of range coal and kindling wood.

(e.) *Bookcase*.—Similar to those provided in class-rooms.

(f.) *Sink*.—Soapstone, 4 feet long; 2 cold and 2 hot water cocks; soapstone drip shelves 24 inches long, at each end of sink, provided with grease trap. Sink should be near ranges.

(g.) *Hot Water Supply*.—(See instructions in plumbing.)

(h.) *Coal and Gas Ranges*.—A six-hole coal range and a similar gas range, with hood provided, and set on a hearth previously mentioned.

(i.) *Refrigerator*.—Location to be shown. Furnished under another contract.

SEWING-ROOM. The following is a list of standard equipment adopted by the School Committee.

(Not to be included in the general contract for building.)

30 Portable tables (inserted yard measure).*

50 Chairs in girls' school*
and

30 In mixed schools, varying in height from 14 inches to 21 inches from floor.*

1 Glass show case about 8 feet long, $2\frac{1}{2}$ feet or 3 feet wide.

1 Cutting table, 8 feet long, 3 feet wide and 2 feet 6 inches high, inserted yard measure, 3 drawers in table, blackboards, minimum of 30 square feet.

Closet for teachers' wraps.

Stationary washbowl with running hot and cold water.

* Not required when no regular "sewing room" is available.

1 7½-lb. electric iron.

1 4-lb. electric iron.

Standard box rack with box for each girl. (See drawing.)

1 Sewing machine for 500 or fewer girls.

KINDERGARTEN. (1.) *Size.*—The rooms can be contained in the space of a class-room and wardrobe, but a slightly larger area, 800 to 900 square feet, is desirable, and preferably the larger of the two allowed sizes of room. They comprise a large room, a small room, a supply closet, a wardrobe and a water-closet. The large room should take a 16-foot circle, regulation lines painted on the floor with at least 4 feet all around it. (See drawing.) The small room, about 200 square feet.

(2.) *Light.*—Windows should be as in a class-room, if on a corner, on both sides. Exposure should be sunny. Artificial light of the class-room type arranged for the different rooms.

(3.) *Doors.*—Door to corridor as in class-rooms. Wide doors should open from small room into large room.

(4.) *Floors.*—Wood or linoleum cemented onto concrete surface, with painted lines as above.

(5.) *Walls.*—As in class-rooms, with black-board as in lower grades.

(6.) *Ceilings.*—As in class-rooms.

(7.) *Heat and Ventilation.*—As in class-rooms.

(8.) *Fittings.* (a.) *Wardrobe.*—Hooks for 60, arranged as in ordinary wardrobes.

(b.) *Teachers' Closet.*—For clothing of two or three teachers.

(c.) *Toilet-room.*—Immediately adjoining with low-down seat and bowl or sink.

(d.) *Bookcase.*—As in lower grades.

NURSE'S ROOM. (1.) *Size.*—From 200 to 400 square feet, according to size of school.

(2.) *Windows.*—Outside light as in class-rooms.

(3.) *Shades.*—Set to roll from window-sill upward. Not in building contract.

(4.) *Doors.*—One door to corridor, as in class-room, marked "Nurse's room."

(5.) *Walls.*—Upper two-thirds plaster, smooth finish, round corners, painted with light green oil paint. Lower one-third to floor, glazed white tile with sanitary base.

(6.) *Floor*.—Terrazzo, like corridors for first-class construction. Composition for second-class.

(7.) *Heat and ventilation*.—As in classrooms.

(8.) *Light*.—Pendant electrolier with special shade. Extra socket on body of fixture for hand portable.

(9.) *Nurse's Closet for Supplies*.—Size, 3 by 4; one shelf; 6 hooks for clothing.

(10.) *Bath Tub*.—Five-foot porcelain enameled iron, hot and cold water, where so directed by the Board.

(11.) *Bowl*.—Enameled iron, hot and cold water faucets with shampoo cock. Hot water must be available all the year.

(12.) *Stove and Clock*.—Gas or electric heater as in teachers' rooms, and a secondary clock.

(13.) *Fittings*.—(Not in building contract.)

(a.) *Cabinet*.—Oak finish medical cabinet, adopted as standard by Schoolhouse Commission.

(b.) *Stool*.—White enamel revolving stool.

(c.) *Table*.—Dressing table, white enamel frame, glass top and shelf; size, 16 to 20, rubber crutch tips.

(d.) *Filing Case for Nurse's Records*.—Oak finish, to hold 1,000 cards, 4 by 6; lock and key; guide cards.

(e.) *Writing Table*.—Oak finish, with drawer and lock; size, 20 by 30.

(f.) *Chair*.—Oak to match table.

(g.) *Couch*.—Flat frame oak, canvas adjustable top.

(h.) *Mirror*.—Size, $2\frac{1}{2}$ by 3, set over bowl.

HIGH SCHOOLS.

CLASS-ROOMS AND RECITA- TION-ROOMS.

High school class-rooms are laid out for classes of thirty-six or forty-two; generally the latter. A room 26 feet by 32 feet will accommodate forty-two high school desks. The larger class-rooms are to accommodate from sixty to eighty pupils; the larger number can be accommodated in a room 33 feet 8 inches by 43 feet. Recitation-rooms, which to a certain extent will be used also as class-rooms, should be about 16 by 26. These rooms, if equipped with continuous desks and seats as in a lecture-room, or with double desks, such as are to be used in the Charlestown High, would accommodate about thirty pupils each. Lay out desks in one room of each type on preliminary plans.

ASSEMBLY HALL. For a high school would not differ materially from that already described for elementary schools.

MASTER'S AND
TEACHERS'
ROOMS. For accommodation of the principal there should be an outer office, that is, a waiting-room or reception-room, and an inner office, and rooms for both men and women teachers, which might well be concentrated in the neighborhood of the reception-room and the principal's room.

CHEMISTRY. *The Rooms in General Required.*—Laboratory, separate from lecture-room, may be used as recitation-room, but better to use lecture-room and keep laboratory free from desks and demonstration table. Lecture-room, separate from laboratory, but easy of access, may be used for recitation; in that case should have facilities for demonstration. Combined lecture-room for physics and chemistry admissible. Three rooms for administrative purposes, store-room for dry chemicals and apparatus, room for storage of liquid chemicals and preparation of reagents, which may also be used as a teacher's laboratory and an office. The total area of the laboratory and administration rooms should be about 1,200 square feet and of the lecture-room about 600 square feet.

CHEMICAL
LABORATORY. (1.) *Size.*—Should accommodate a class of forty to fifty pupils, with apparatus. Accommodation for three such classes.

(2.) *Light.*—On two sides.

(3.) *Heating and Ventilation.*—On same basis as for class-rooms, but removal of gases should also be provided for by a hood, each compartment of which should be ventilated by 9-inch hole at top, venting into elbow or T of drain pipe, thence connected by drain pipe into main flue, in which should be a fan operated by a motor.

(4.) *Walls and Ceiling.*—Walls of brick ideal, but not generally feasible, except on outside walls; plaster walls painted in oils and ceiling of plaster, covered with water-resisting surface containing no lead. All woodwork to have natural finish, except tops of desks.

(5.) *Floor.*—Preferably of concrete; may be of hardwood in narrow strips, filled in by asphalt; should slope very slightly between desks, interspaces again trending to common corner, which may be drained.

(6.) *Equipment.*—Working desks at right angles to greater length of room, in sections back to back between windows; sections movable when top is removed. Each section 21 feet to 24 feet 6 inches long, 2 feet wide, 3 feet to 3 feet 2 inches in height. Distance between double sections about 5 feet, same distance at least between ends of sections and hood, which should be opposite longer line of windows and at right angles to direction of desk sections. Other ends of sections near enough to wall to allow for drain at right angles to sections and under windows. Desks to be of ash or any durable wood, natural finish. Top of narrow pine strips, treated with aniline black and waterproof lead finish. Individual desks provided with 3 lockers and 3 sets of drawers each, each set of drawers operated by bar from locker, combination lock to fasten locker. Each double section of desks provided with soapstone sink, placed between sections and flush with section top, which should slope slightly to sink.* Sink 8 inches wide at least, and should begin within 1 foot of the end, toward hood, depth here to be 6 inches, running nearly to other end, where depth should be 8 inches. Each pupil to have working space of 3 feet 6 inches by 1 foot 8 inches. Each double section of desks provided with shelf for reagents, running length of desk, 10 inches to 12 inches above desk, supported by metal standards at suitable intervals, of white wood, $1\frac{1}{4}$ inches thick, 9 inches wide, natural finish, covered with glass plates, $\frac{1}{4}$ inch thick, 9 inches wide, suitable lengths, clamped to wooden shelf with as few clamps as possible. Wooden shelf at free end of each section, 1 inch to $1\frac{1}{2}$ inches thick, 3 feet to 4 feet long, not over 1 foot 3 inches wide, height of 2 feet 8 inches to 2 feet 10 inches, for holding blast lamps, reagent jars, etc. Finish off top of shelf in aniline black. Floor space under second row of windows taken up with line of extra desks, built like sections, furnished in similar way, but without necessarily a drain to be used for emergency or general utility. Wall space not otherwise occupied may be used for shelves or cabinets. Fixed slate blackboards at end opposite second set of

* Individual sinks are preferred by the teachers, although the long trough is apparently adequate for teaching elementary chemistry, and is less expensive.

windows and parallel to desk sections, sliding slate blackboards above hood. Liquid waste may be thrown into desk sink, dry waste into earthen jars. Hood should run at right angles to desk sections and along wall opposite free ends of sections. In the construction of hood, protection against fire should be considered. Should be built against brick wall. Floor of hoods to be slate; wood, inside and outside, to be finished natural. Space divided into three or four compartments, closed by sliding windows. Space against wall not occupied by hood for general link.

(7.) *Gas*.—Lead from gas main at free end of centre of double desk sections, branch into two leads along back of each section. Take-offs between each working desk space in form of pillar with two $\frac{1}{4}$ -inch cocks, at each end desk a single cock. Two $\frac{1}{4}$ -inch gas nipples at each side of each compartment of hood. Cocks of these outside of hood. Wall desk fitted with single gas taps at intervals of two feet.

(8.) *Water*.—Lead from water main at free end of centre of double desk sections. Size, large enough to fill section sink rapidly. Lead of ordinary size along length of section underside of shelf, take-off at free end of section, to which blast and suction pump may be attached. At junction of each four working desk spaces take-off, carrying two valves with hose bibb delivery $\frac{1}{4}$ -inch, the two valves or cocks facing opposite sides. Suction pump attached to these bibbs if desired.

(9.) *Drains*.—Section desk sink to have open drain and mercury arrester, into which should be set movable concave netting of wide mesh to arrest larger solid matter. Main desk drain at right angles to sections along and under windows, between windows and sections should be in form of wooden trough, in sections dovetailed from 6 inches to 8 inches inside diameter and equally deep, covered with asphalt paint or filling; may be supported on brackets against wall and left open, or covered and provided with movable top. Into this drain will drip the lead pipes coming from section sink. Slate floor of each hood compartment should deepen slightly in centre, where there should be a hole 1 inch in diameter, into which is fitted short lead drain pipe, closed by perforated plug; drain pipes to be con-

LECTURE AND
RECITATION
ROOM.

nected with sloping drain pipe, open or closed, running toward and delivering into general sink.

(10.) *Electricity*.—Current of electricity on section desks need not exceed ten volts, may be supplied from source common to physical and chemical side. Plugs between each working space placed under desk top on frame.

(1.) *Size*.—Area to depend on number of seatings required or number of pupils in classes; should be large enough for two classes and should occupy a position between the laboratories for physics and chemistry.

(2.) *Light*.—As much glass area as classroom, preferably from left. Fit windows and other openings admitting light with dark curtains as specified under Assembly Hall. Electric lighting from top, controlled at point convenient to demonstration table.

(3.) *Floor* stepped up in fireproof construction and finished in wood, like floor.

(4.) *Heating and Ventilation*.—As for classrooms, with extra ventilation to remove fumes. Space at left end of desk provided with register and flue of at least 10 inches diameter, to afford means of down draught. Flue carried under floor to nearest wall, flue and draught actuated by motor if not sufficient.

(5.) *Equipment*.—Demonstration table, not less than 12 feet long, not more than 3 feet nor less than 30 inches wide, height 32 inches. Placed 4 feet distant from wall, material same as that of room, top made of pine plank and finished like chemical laboratory desks. Pneumatic sink at right hand of desk, of soapstone in two depths. Not to exceed 30 inches long, 20 inches wide. Depth, 4 inches to 6 inches minimum; 16 inches to 18 inches maximum. Length of minimum depth not to exceed 60 per cent of total length. Sink to be depressed in table and provided with flush cover. Sink to have screened drain with mercury trap and overflow. Supply hot and cold water under reduced pressure and cold water under street pressure for quick filling, 2 goosenecks with $\frac{3}{4}$ -inch hose bibbs, to one of which combined blast and suction pump may be attached; steam supply direct from boiler main with a by-pass to summer boiler; supply gas air suction, and gas taps not exceeding 6 in number. Over demonstration table, secured to ceiling, provide a plank with heavy screw hooks.

Behind lecture table provide sliding blackboards of not less than 50 square feet, and a canvas curtain on heavy spring roller for attaching charts. Drawers and closets for lesser lecture apparatus and chemicals in body of table, wall on either side provided with shelves for reagent bottles under glass, and side wall provided with cabinets for larger pieces of permanent apparatus, if there is no special room for this. Lifting seats with desk for taking notes arranged on platforms, so that the successive tiers will rise one above the other to insure an unobstructed view of demonstration table. (See drawing.)

(6.) *Electricity*.— Provide three (3) forms of current, viz., one circuit for direct current at 110 volts, 30 amperes, and one circuit of 5 to 20 volts, 50 amperes, and one circuit for alternating current at 110 volts, 30 amperes. Regulating rheostat for the 5 to 20 volt direct current to be located conveniently to table. A 50-ampere ammeter and a 125-volt voltmeter, both with extra large illuminated dials, mounted on swing brackets in full view of class and instructor; suitable means for switching ammeter and voltmeter to either circuit. Terminate circuits in non-reversible push plug receptacles. A projection lantern and receptacles for same at end of table and at rear of room. Lantern screen on spring roller at side of room, width of screen usually 12 feet, but dependent on distance and lenses used.

ADMINISTRATIVE
FACILITIES.

(1.) *Apparatus Store-room*.— Should give ample space for storage of extra and reserve apparatus and original packages of stock chemicals. These should be kept in dust-proof cabinets with glass doors and in drawers.

(2.) *Preparation-room*.— This should adjoin the above. Primarily for storage of liquid chemicals in bulk and preparation of liquid reagents and storage of supply bottles, also fitted for teachers' laboratory. Should have wide centre table with gas in centre, working desks, with drawers and closets along two sides, also gas, water, sink, blast, suction, steam and electricity. Shelves along desks for storage of liquid chemicals, supply bottles and smaller reagent bottles. An adequate hood should be provided.

(3.) *Office and Balance Room*.— Adjoining store-room and preparation-room should be

PHYSICAL
LABORATORY.

small room to contain desk, book shelves, table and a good grade balance.

(1.) *Size*.— In a space about 30 by 40 feet. A laboratory, apparatus-room and shop.

(2.) *Light*.— The same basis as for class-rooms, one wall having as direct a southern exposure as possible for *porte lumiere* studies. Artificial light as in a class-room. Dark curtains in addition to regular shades for darkening room. Windows and all openings admitting light fitted as specified under Assembly Halls (page 66).

(3.) *Heating and Ventilation*.— On same general basis as for class-rooms.

(4.) *Equipment*.— Small laboratory tables to accommodate two or four pupils at each, built of hard wood, white pine tops, fitted with 4 drawers, supports and adjustable cross-bar. Wall tables around room on sides where there are windows, with one or two shallow drawers under, but not deep enough to interfere with comfort of pupil. Soapstone drip sinks with cold water to be provided at these tables, one to every six or eight pupils. Instructor's table, fitted with hot and cold water, Richards' pump, numerous cupboards and drawers of various depths and widths. Two-inch plank bolted to ceiling over this table, with space of 2 or 3 inches between plank and ceiling for attachment of pendulums and other apparatus. Provide electric outlet for stereopticon and screen for same.

(5.) *Furniture*.—Provide adjustable stools for all the tables and a sufficient number of tablet arm chairs to accommodate the entire division during demonstration exercises. Chairs to be placed in rectangle formed by pupils' tables and demonstration table. These are not in building contract, but to be laid out on preliminary plans.

(6.) *Electricity*.— One outlet for direct current at 110 volts E. M. F. and 30-ampere capacity. One outlet for direct current at low voltage with regulator conveniently located. One outlet for alternating current at 110 volts E. M. F. and 30-ampere capacity. One outlet for each kind of current at demonstration table, to be single pole push plugs instead of binding posts. Series and multiple connections at each pupil's table. Switch in laboratory to cut out pupils' tables.

(7.) *Gas*.—Pupils' tables to be equipped with gas, 4 cocks to each table. Wall tables to be equipped with gas. Demonstration table to be provided with gas.

(8.) *Bulletin Board*.—25 to 50 square feet of bulletin board, covered with burlap, secured at edges, but not glued on like wall paper.

(9.) *Blackboards*.—As much blackboard space as possible. Sliding blackboards back of demonstration tables.

APPARATUS- ROOMS.

(1.) *Size*.—One large or several small rooms, to open directly out of laboratory, and connected with lecture-room.

(2.) *Equipment*.—To be fitted with dust-tight cases with adjustable shelves and sliding glass doors, 7 feet high; cabinets of drawers of various widths and depths, mostly narrow and shallow. Some of these cases may be in the laboratory if there is sufficient wall space. A small sink and hood should be provided.

SHOP.

A small shop is desirable, though not absolutely necessary. This should be equipped with work bench, power lathe, belted to motor generator, and shelving for tools and stock, and may be set up in apparatus-room.

BOTANICAL AND ZOOLOGICAL LABORATORY.

(1.) *Size*.—In a space about 30 by 40 feet. Laboratory and apparatus-room.

(2.) *Light*.—Windows the same as for class-rooms, one wall with southern exposure. Artificial light as in class-rooms.

(3.) *Equipment*.—(a.) Twenty-one pupils' tables, 54 inches by 24 inches by 30 inches high, each to accommodate two pupils, to have plate glass tops.

(b.) Soapstone sink, 72 inches by 30 inches, 10 inches deep, accessible on all sides. Supply with cold water, about 8 bibbs and 2 hose bibb cocks.

(c.) One aquarium, 30 inches long, 20 inches wide and 20 inches high, with supply, gooseneck cock with aspirator and standing waste.

(d.) Ice chest, 36 inches by 24 inches.

(e.) Cases built wherever practicable. Three sections to contain 42 pigeonholes, 3 inches by 3 inches by 8 inches, for storage of instruments. A liberal supply of cases to contain drawers and cupboards in lower compart-

GYMNASIUM
AND DRILL
HALL.

ment, and shelves above, for exhibition of specimens, storage of material, instruments, books, charts, etc.

(4.) *Furniture*.—Forty-two adjustable screw revolving chairs, not in building contract.

(1.) To be used in common for gymnasium exercises, athletic games and the drilling of the school cadets. On account of its size and for structural conditions to be generally located in the basement, with clear span of ceiling and combined height of basement and first story. Visitors' gallery generally provided at one end, entered from first floor.

(2.) *Size*.—The classes exercising in the gymnasium are from fifty to one hundred, and a suitable floor space for this number, as well as floor space for a full company of cadets at drill, is from 3,750 to 4,000 square feet. The height should not be less than 24 feet.

(3.) *Light*.—Ample outside light in all cases. Electric light from ceiling protected with wire guards.

(4.) *Heat and Ventilation*.—The former sufficient to guarantee a temperature of about 60 degrees, and about twice as much ventilation as is customary for the ordinary classroom. This is, of course, insufficient for the number of people who might occasionally occupy the gymnasium for exhibitions, but it is more than enough for the ordinary number using it for class exercises.

(5.) *Equipment*.—The standard gymnastic apparatus consists of the following fixtures, which may be slightly modified in particular cases:

- 25 Bar stalls.
- 25 Bar stall benches.
- 2 Double booms.
- 4 Double boom saddles.
- 20 Vertical climbing ropes.
- 2 Swedish boxes.
- 12 Balance beams.
- 2 Pairs jump standards, 6 feet.
- 12 Pairs jump standard iron pins.
- 6 Pairs jump standard ropes with weight on ends.
- 2 Pairs basket ball goals.
- 1 Fairbanks scale with measuring stand attached.
- 1 Dry spirometer and 24 glass mouth-pieces.
- 1 Tape, measuring 50 feet.
- 1 Truck for mat (small).
- 2 Jump boards (incline).
- 1 Graphophone.
- 18 Records.

- 2 Brown mats, 5 feet by 5 feet by 2 inches.
- 2 Brown mats, 5 feet by 10 feet by 2 inches.
- 3 Basket balls.
- 2 Strike balls, 12 inches.
- 12 Medicine balls, $2\frac{1}{2}$ pounds.
- 4 Indoor baseballs.
- 2 Indoor baseball bats.
- 4 Volley balls.
- 24 Bean bags (green and red).
- 4 Bean bag boards.
- 75 Pairs $\frac{3}{4}$ -lb. maple dumb bells.
- 6 Ring foil standards.
- 75 Pairs $\frac{3}{4}$ -lb. maple Indian clubs.
- 1 Tennis net.
- 1 Volley net.
- 36 Rope quoits, 9 inches.
- 75 Maple wands, $\frac{3}{4}$ inch diameter.
- 4 Basket ball whistles (tin).
- 6 Paper baskets.
- 6 Ring toss stands.
- 75 Solid rubber bounding balls, $2\frac{1}{4}$ inches diameter.

(6.) *Gun Racks*.—Racks for holding the guns carried by the cadets should be provided on walls. These racks should be protected by locked doors.

(7.) *Special Rooms*.—Adjoining gymnasium and drill hall two small rooms about 10 feet square should be provided for school matron and director of gymnasium.

(8.) *Dressing-rooms, Baths and Lockers*.—
(a.) *System*.—The clothing of all the pupils is in a central locker-room, each suit being numbered, and all being under the control of the attendant in charge. Dressing-rooms are provided in number equivalent to the number of a class. A class coming for exercise are given their gymnasium clothing and keys to dressing-rooms, which they lock behind them when exercising. After exercise they can take a shower bath. When dressed the dressing-room keys are given up, but the gymnasium clothing is left to be gathered up by the attendant. The clothing is carried to the dry-room, and when dried each set is put back in its proper pigeonhole.

(b.) *Lockers*.—The locker-room is controlled by the attendant, and contains pigeonholes, 10-inch cube, one for each pupil in the school, and a counter over which to deliver the clothing. Adjoining this is the dry-room, capable of being heated to a high temperature and thoroughly ventilated. This is fitted with hooks and clothesline.

(c.) *Dressing-rooms*.—The dressing-rooms

are small cabins, about 3 feet square, with a locked door, a seat and hooks.

(d.) *Showers*.—The shower baths are 3 feet square, divided by slate partitions, similar to those for water-closets, each having a bar at the front, over which a cotton sheet can be dropped. Each compartment has two sprays in opposite corners.

MANUAL
ARTS ROOM.

Rooms shall be provided for drawing, and in boys' schools for shop work in addition.

(1.) *Size*.—The space for each subject should be about 1,500 to 1,800 square feet.

(2.) *Light*.—Windows and artificial light by special fixtures. North light preferable in the drawing-rooms.

(3.) *Floors*.—Of wood.

(4.) *Walls*.—As in a manual training room.

(5.) *Ceilings*.—As in a manual training room.

(6.) *Heating and Ventilation*.—Same as in manual training rooms.

(7.) *Stock-room*.—The lumber stock-room should contain at least 80 square feet, and preferably be rectangular. Shelves as directed.

(8.) *Teachers' Closets*.—As in manual training room.

(9.) *Fittings*.—(a.) Bookcases, like those in class-rooms, 150 capacity.

(b.) *Cases*.—For work in process, extra tools, supplies, drawing boards, models, paper, finished drawings, etc. (For all of these get directions and see former High School drawings.)

(c.) *Display Frames*.—Size and position as directed, to be of burlap over soft wood back with 2-inch moulding around.

(d.) *Sink*.—A 5-foot sink, with hot and cold water, fountains as directed.

(10.) *Equipment of Free-hand Drawing-room*.—Provide at least 25 oak drawing tables of approved type to be used by boys and girls in common.

(11.) *Equipment for Mechanical Drawing-room*.—(For boys only.) See Appendix XII. and former High School drawings.

(12.) *Equipment of Woodworking Rooms*.—(For boys only.) Provide at least 20 cabinet benches of approved type with quick action, iron vises. Provide glue pot with electric or gas connections as directed. Machinery if directed.

(13.) *Equipment of Metal-working Room.*—(For boys only.) Six double benches 8 feet by 2 feet, fitted with 12 Prentiss iron vises, $3\frac{1}{2}$ -inch jaw; wall bench fitted with 10 stations, tool drawers and 5 Bower's tool holders; one $\frac{1}{4}$ -inch gas hose cock terminal above each bench station; 2 gas blast burners, 1 large, 1 small; metal-covered bench with ventilated hood; 1 muffle furnace, ventilated; 1 drill; 1 grindstone; 1 pair bench shears. Machinery if directed.

(14.) *Motor.*—If directed.

(15.) *Blackboards.*—For each class-room for above subjects provide about 15 running feet of slate blackboard 4 feet high.

HOUSEHOLD
SCIENCE.

(1.) *Size.*—The space should be about 1,200 square feet, and should accommodate the kitchen, two small rooms for showing the care of a dining-room and of a bedroom, and a china closet and pantry.

(2.) *Light, Heat, etc.*—The same as that for other rooms, with additional ventilation in the kitchen.

(3.) *Equipment.*—The kitchen to contain an equipment as may be decided upon by the Board after consultation; a kitchen pantry fitted with shelving and a china closet fitted with a sink; drawers, cupboards and shelves enclosed with glass doors. The dining-room and bedroom simply finished rooms, having no equipment except the furniture.

LUNCH-ROOMS.

(1.) *In General.*—The lunch-rooms in Boston schools have usually been located in the basement, and where these are high and well lighted this location seems to serve satisfactorily. They should, however, have the special ventilation that is provided in a basement cooking-room. In size they should accommodate comfortably, seated at benches or small tables, that proportion of the pupils in the school which takes advantage of the luncheon facilities.

(2.) *Equipment.*—(a.) The counter should be set at height as required, and should have a rail 2 feet from it, with openings at intervals, to keep children in single file, and there should be accommodation under the counter for dishes.

(b.) *Range.*—A six-hole gas range, with ample oven space.

(c.) *Sinks.*—Two good-sized soapstone sinks.

(d.) *Ice-box*.—Of sufficient size to take care of milk supply.

(e.) *Lockers*.—Sufficient to care for the clothing of the attendants, and for mops and brooms, etc. These should not be under the counter or near any place where food is kept.

(f.) *Furniture*.—In some cases the children are provided with camp chairs and small round tables to seat four. In others ordinary school benches have been provided. Both seem fairly satisfactory in operation.

LIBRARY.

A space equivalent to a small class-room is ample for library purposes. The book accommodation will depend somewhat on the size of the school. The library is planned as a reading-room, that is, with the books in the room and not in a separate stack-room.

WARDROBES.

(1.) In high schools large locker rooms — one for boys and one for girls — are to be provided, preferably in basement, fitted with metal lockers as the Board may direct; metal lockers are to be under separate contract.

(2.) *Light*.—The rooms should have outside light.

(3.) *Heat and Ventilation*.—This should be thoroughly well heated and ventilated similar to class-rooms.

(4.) *Equipment*.—The poles, hooks, etc., will be similar to those used in other schools, but more space should be given the girls, *i. e.*, about 1 foot 6 inches on centre. It has been found desirable to have some locked pigeon-holes, 20 by 20 by 12 inches. These are not required when metal lockers are used.

ELECTRIC
WORK.

(1.) *Service*.—This should enter basement underground at location to be determined by reference to street mains, and should terminate on a switchboard located in a fireproof closet, opening if possible into the basement corridor.

(2.) *Conduits*.—All wires to be run in iron conduit concealed, except conduits for mains in basement, and side outlets in boiler, engine and stack rooms. Tap circuit conduits to be run above rough floor wherever possible. If floor construction will not allow this, they are to be run below floor beams and above ceiling, a space of 2 inches being left in which they can be run.

(3.) *Wire Slot*.—Obtain from electrical division the location of slots and openings for conduits and panel boards.

(4.) *Cabinets.*— All cabinets to be furnished by wiring contractor, but finished by the general contractor.

(5.) *Cutting.*— All cutting and patching to be done by the general contractor.

(6.) *Outlets.*— Class-rooms to be provided with nine four-light ceiling outlets, controlled by three switches. Wardrobes to have one ceiling outlet, controlled by switch in class-room. Corridors to be lighted from ceiling wherever possible. Height of side outlets in rooms and corridors to be 6 feet 6 inches. Switch outlets in class-rooms to be 6 feet, elsewhere 4 feet. Switches in corridors, play-rooms and pupils' toilet-rooms to be operated by private key. In lower elementary schools omit all electric lighting in class-rooms. Basement and corridor lighting to be installed as directed by the Board.

(7.) *Fixtures.*— Fixtures in class-rooms to be of special design to combine a direct and diffused light.

(8.) *Gas.*— Gas outlets to be provided in all corridors, vestibules, stairways, boiler-room and assembly hall exits; all to be wall outlets. Gas-piping to be included in the electrical engineer's work.

(9.) *Stereopticon.*— All grammar schools and high schools to be provided with an electric projection lantern with reflectoscope attachment.

(10.) *Clocks and Bells.*— All schools to be provided with an electric system of clocks, operated by a master clock. All primary schools to be provided with a system of signal bells, operated by push buttons. In all grammar and high schools the bell system to be operated automatically by master clocks, according to prearranged program.

(11.) *Telephones.* In all schools, each class-room, hall, teachers' room and boiler-room to be connected to master's office, or to room occupied by the first assistant, by a telephone system.

In lower elementary schools omit class-room telephones except in first assistant's room, boiler-room and one corridor.

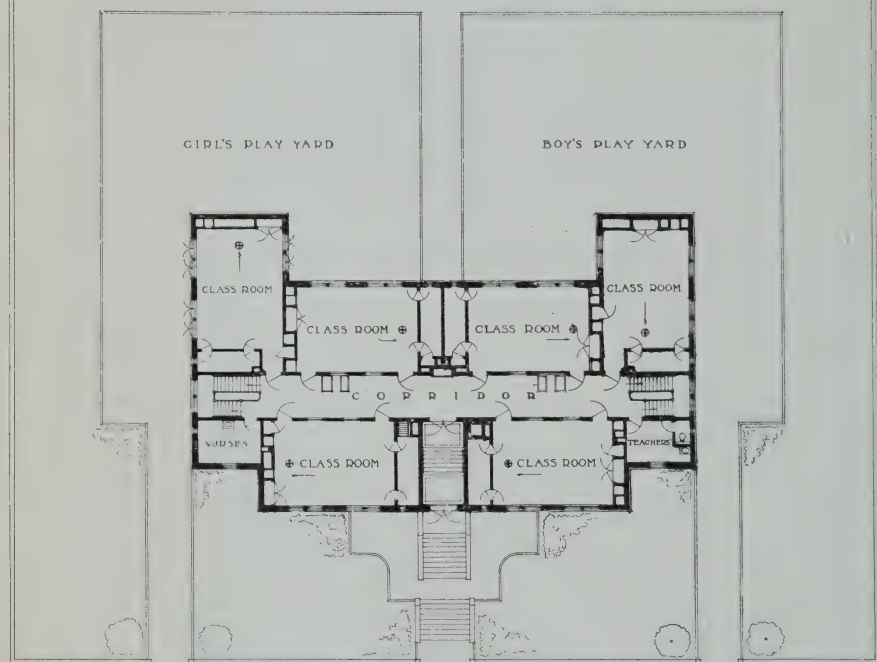
NOTE.— Drawings showing special fittings for both plumbing and interior fittings will be found in Appendices XII., XIII. and XIV.



MARY LYON SCHOOL.

UPPER ELEMENTARY SCHOOL
BENNETT DISTRICT
HESTER AND TURNER STREETS

RICHARDSON BAROTT & RICHARDSON
ARCHITECTS



FIRST FLOOR PLAN

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
SCALE

MARY LYON SCHOOL.

APPENDIX VIII.

I.

NEW BUILDINGS — BOND ISSUE.

LIST OF 1913-1914.

Item 5. Elementary School, Bennett District. This one-story building is being erected on a lot purchased by the city, situated between Turner street and a Board of Survey street in the Bennett District. The lot contains 40,000 square feet, and the building covers 6,646 square feet.

The basement contains boys' and girls' toilets and play-rooms, the boiler-room, coal and fan rooms, janitor's, two book-rooms, and the electrician's closet; and has four exits to the yard.

The first floor contains six rooms, 20 feet by 28 feet, nurse's and teachers' rooms.

The material of the walls is brick, with cast stone trimmings, and the construction is second class, with fireproof floor over boiler and coal rooms.

Heating and Ventilating System.—The building contains a plenum system of ventilation; one horizontal return tubular boiler supplies steam to the heating system at a pressure of one to five pounds, the water of condensation returning to the boiler by gravity.

A fan belt driven by an electric motor furnishes air for ventilation; the air is heated by a primary stack of indirect radiation, the temperature being maintained at 68 degrees Fahrenheit by mixing dampers controlled automatically by a thermostat with graduated action and located in the fresh air duct.

The building is warmed by direct radiators. Those in the class-rooms are the wall pattern placed under the windows and automatically controlled by room thermostats.

All water-closets in the basement toilet rooms are provided with outlets for seat ventilation, which are connected together by galvanized-iron ducts and run in separate flues to the top of the main ventilator. Connection is also made to the space back of the urinals. Toilet ventilation is assisted by aspirating coils placed in the flue.

Electrical System.—Basement and corridors are equipped with complete electric lighting, and conduits installed for class-rooms and corridors, electric clocks, program bells, intercommunicating telephones and a fire alarm system.

Item 9.—Trade School for Girls, Trade School Addition. This addition consists of the house No. 616 Massa-

chusetts avenue, which was purchased by the city. The lot contains 2,860 square feet, and the house covers 1,503 square feet.

The basement has been remodeled to contain a boiler and coal room, which will heat the entire school, the power plant being insufficient and dangerous; a janitor's room and store-room have also been added and connections made with the rest of the school on this and the other floors.

The first floor contains a teacher's room, with lockers and two rooms.

The second floor contains three rooms and bath.

The third and fourth floors four rooms.

New linoleum was laid on the floors and the entire building was painted and cleaned. On the top floor new windows were built, giving ample light and air.

Heating and Ventilating System.—The old boiler in the present building was removed and two new sectional ones provided and set up in the new addition. The building is heated by direct radiation, which was repiped, new valves added and connected up to the new boiler plant. A new system of hot water used in the kitchen and other rooms was installed. Additional coal space was provided in the new building, and the entire heating plant overhauled and put in first-class condition.

Electrical System.—The Trade School for Girls, 618-620 Massachusetts avenue, is wired and equipped for complete electrical lighting, program bells, intercommunicating telephones and fire alarm system; also outlets for heat and power.

Item 12.—Everett School Addition, Everett District. This addition consists of an assembly hall and master's office.

The first floor contains the assembly hall, 50 feet by 70 feet, with two ante-rooms, corridor, public toilet and fan-room. There are two public entrances and one for the school.

On a portion of the upper floor is the master's office, with waiting room and toilets.

The materials used are similar to those in the present building.

Heating and Ventilating System.—This building contains a plenum system of ventilation. The steam is supplied by the boilers located in the old building. A fan belt driven by an electric motor furnishes air for ventilation.

The air is heated by a primary stack of indirect radiators, temperature being maintained at 68 degrees Fahrenheit, by mixing dampers controlled automatically by a thermostat with graduated action and located in the fresh air duct. The hall is warmed by direct radiators placed under the windows automatically controlled by positive thermostats. All other rooms are warmed by direct radiation.

Ventilation is procured by means of galvanized-iron ducts running from the floor of the assembly hall to large ventilators on the roof.

Electrical System.—The Everett School is wired and equipped for electric lighting in the assembly hall and principal's office, and additional electric bells and telephones.

II.

NEW BUILDINGS — TAX LEVY APPROPRIATION.

LIST OF 1913-1914.

Item 2.— Samuel Adams Addition, Samuel Adams District. This addition consists of a third story added to the present building. It contains four class-rooms 29 feet by 33 feet, two 31 feet by 33 feet, fan, sewing and two book rooms.

The materials used are the same as those in the present building.

Heating and Ventilating System.—The present horizontal tubular boilers were found large enough to heat the new floor. The fan, belt-driven by an electric motor and located on the third floor, furnishes air for ventilation.

The air is heated by a primary stack of indirect radiators, the temperature being maintained at 68 degrees Fahrenheit by mixing dampers controlled automatically by a thermostat with graduated action and located in the fresh air duct.

The class-rooms, corridors and other rooms are warmed by direct radiators. Those in the class-rooms are the wall pattern placed under windows and automatically controlled by room thermostats.

The ventilation ducts from the small toilet rooms are connected into main ducts and carried to the top of the main ventilators on the roof. Ventilation of the toilets is assisted by aspirating coils placed in the room.

Electrical System.—The Samuel Adams School is wired and equipped for electric lighting throughout, electric clocks, program bells, intercommunicating telephones and a combined local and auxiliary fire alarm system.

Item 5.— Elementary School, Lawrence District. This school is being built on a lot on Gold and West Fifth streets, South Boston, containing 21,348 square feet. The building covers 5,402 square feet. The lot is adjacent to the Norcross School, and additional play space will be available for that school.

The basement will contain boys' and girls' toilets and play-rooms, fan, boiler and coal rooms, janitor's room and electrician's closets, with two entrances to the yards. The coal pocket will be underground, with facilities for coaling directly from the street.

The first floor contains two class-rooms 20 feet by 30 feet, one 21 feet by 31 feet, and a kindergarten 44 feet by 21 feet, divided by folding doors into two parts, nurse's room, with bath and toilet and an emergency toilet.

The second floor contains two class-rooms 20 feet by 30 feet, one 21 feet by 31 feet, one 32 feet by 21 feet, teacher's room and toilet and a master's room.

The third floor contains the same class-rooms as the second, with a book-room and a supply-room.

The materials used in the construction are dark red brick for the walls with limestone trimmings. The roof is tar and gravel.

The construction is second class, with fireproof construction over boiler and coal rooms.

Heating and Ventilating System.—This building contains a plenum system of ventilation. Two horizontal return tubular boilers supply steam to the heating system at a pressure of from one to five pounds, the water of condensation returning to the boiler by gravity.

The fan, belt-driven by an electric motor furnishes air for ventilation. The air is heated by a primary stack of indirect radiators, temperature being maintained at 68 degrees Fahrenheit, and mixing dampers controlled automatically by a thermostat with graduated action and located in the fresh air duct.

The building is warmed by direct radiators. Those in the class-rooms are the wall pattern placed under the windows and automatically controlled by positive thermostats.

All water-closets in the basement toilet-room are provided with outlets for seat ventilation, which are connected together by galvanized-iron ducts and run into two separate flues to the top of the main ventilator. Connection is also made to the space back of the urinal. Ventilation of the toilet-rooms is assisted by aspirating coils placed in the flues.

Electrical System.—In the Lawrence District basement and corridors are equipped for electric lighting, building equipped for electric clocks, program bells, telephones and fire alarm system.

Item 6.—Tileston Addition, Tileston District. This addition is the completion of the new E. P. Tileston School, as planned when the present portion was erected. The old Tileston School has been removed to make room for it. The addition covers 6,447 square feet, and contains in the basement a boys' play-room and sanitary, manual training-room, and a game and play room. The urinals from the present boys' sanitary are to be moved to the addition, and the space they now occupy used for more girls' closets.

An additional boiler has been installed on existing foundations to take care of the added rooms.

The first floor contains an assembly hall, 72 feet by 60 feet, with ante-rooms, three new rooms, 27 feet by 22 feet, and one 23 feet by 32 feet, and a sub-master's room.

The second floor contains three rooms, 29 feet by 22 feet, one 23 feet by 32 feet, library and storeroom.

The materials used are similar to those used in the present building.

Heating and Ventilating System.—The addition, like the original building, is warmed and ventilated by a low pressure steam gravity return gravity indirect system.

Another return tubular boiler is installed, 60 inches in diameter and 16 feet 3 inches long, containing seventy-four 3-inch charcoal iron tubes 15 feet long.

A total of 7,409 square feet of radiation is installed, the class-rooms and assembly hall being warmed by indirect pin radiators placed in brick chambers in the basement. All other rooms are heated by direct radiation in the rooms.

The temperature of the air entering the class-rooms and hall is controlled by hand-mixing dampers operated by the teacher or janitor.

Foot warmers are placed in the first floor corridor near the entrances.

All heat and vent ducts in the building are made of galvanized iron.

Ventilating ducts are provided in all the toilet-rooms and connected to the main ventilators on the roof.

Ventilation is assisted by aspirating coils placed in the main flues.

Electrical System.—Edmund P. Tileston School is wired and equipped for complete electric lighting, electric clocks, program bells, telephones and fire alarm system.

APPENDIX IX.

REPORT OF THE ARCHITECTURAL DIVISION FOR
THE YEAR ENDING FEBRUARY 1, 1914.

This division has had an exceedingly busy year. At the beginning of the year in addition to our regular work we had several emergency jobs, such as supporting the stairs of several schools, the continual hammering caused by the passing of files of pupils up and down had in each case weakened the construction. The commissioners thereupon issued instructions to the masters of the schools that the pupils were not to keep step while filing up or down the stairways.

The laying out of the work was delayed considerably by our not knowing whether a special appropriation was to be obtainable. As soon as this was determined the work was pushed vigorously.

Among the major items executed were the following:

Frothingham School.— Teachers' and nurse's rooms.

Gilbert Stuart.— Book-room.

Old Mather.— Making the assembly hall into class-rooms.

Commodore Barry.— Making the assembly hall into class-rooms.

South Boston High.— Passage to boys' showers.

School Committee.— Alterations on first floor and building partitions in two offices.

Everett.— Removing old roof damaged by fire and building new roof, and making good damage done by fire and water throughout the building.

West Roxbury High.— Building partition in old assembly hall.

Copley.— Roof changes for the purpose of fresh air classes, and additional space for the children to play, as the yard around the school is small.

Dorchester High.— Making another large class-room in the attic space for the teaching of domestic science. A similar one was built the previous summer (1912) and it was declared such a success that it was decided to enlarge and extend the classes.

Dorchester High.— New and additional equipment for three rooms at the top of the building.

In connection with this an innovation in school equipment was provided by installing a cabinet clothes dryer, heated by steam and ventilated to an adjacent stack. This is reported by the teachers as being a great convenience and very satisfactory.

Mary Hemenway District.—In the vicinity of Commercial Point accommodations for two classes were required, and this was obtained by moving two of our heavier type of portable buildings to this location and adding sanitariums between.

William E. Endicott.—Building a new room for nurse.

Manual Training Accommodations.—A very considerable amount of equipment was provided. A new scheme was tried of placing compartments below the bench tops which are to take the place of the large stock cases that are to be used when the space is limited.

Names of five schoolhouses were either changed or cut anew.

Trade School for Girls.—As an enlargement of the present building was required, the commissioners acquired the property adjoining to the westward. This was occupied previously as a lodging house, and to put it in shape for school purposes extensive alterations and repairs were required. The previous boiler plant for the school was quite inadequate, and a new one was installed in the newly acquired addition.

High School of Commerce.—A board running track, thirteen laps per mile, was installed in the open courtyard.

Norcross.—Installing cooking-room and equipment.

Gaston.—Installing cooking-room and equipment.

Damon.—Building teachers'-room.

Lawrence, Norcross, Cushman, Hancock, William Eustis, English High Annex.—Supporting stairs.

SANITATION.

Henry L. Pierce, Gaston, Paul Revere.—Installing new sanitation.

Bids were obtained for new sanitation at Minot.

Sherwin.—Yard drainage changed.

Asa Gray.—Yard drainage changed.

Mayhew.—Changes made in sanitariums.

Paul Revere.—Showers rearranged.

Fireproofing.—Fifty-three jobs of fireproofing were done by this division, and almost wholly completed during the summer vacation.

Fire escapes and exit stairways were installed on fourteen buildings at a cost of about \$25,000.

The above with many smaller items makes a fair survey of the past year's work and for practically all of these jobs competitive bids were obtained. We have endeavored as far as possible to reduce everything to a standard and to avoid continual repetitions of the same work. We have tried to obviate fire risks in every possible way. In many cases we have removed old wooden ventilation flues, and have changed many class-room doors to swing out; we have also removed many closets from under stairways.

The division at present consists of four draughtsmen. A fifth man was employed for a period of about six weeks in order to hasten the work on fire escapes.

APPENDIX X.

REPORT OF THE CIVIL ENGINEERING DIVISION.

The Civil Engineering Division is made up of a civil engineer, a transitman and a rodman, with a temporary man during the summer months. The work consists in making lot plans showing lines, grades, borings, etc., for all new buildings, and furnishing the architect with necessary data to make building plans. The civil engineer supervises all work on new buildings relating to lines, grades, paving, etc. During the year past this division has made plans and supplied data for nine new buildings and additions to buildings. It has charge of the taking of all lands under the direction of the Schoolhouse Commissioners. It has prepared plans and specifications for grading and paving of yards, retaining walls, etc., moving portable buildings and minor repairs on yards. With the exception of the minor items the work was done under contract to the amount of \$51,000.

SCHOOLYARD PAVEMENTS.

The problem of a suitable play-yard pavement has not as yet been satisfactorily solved.

The school yards of Boston have surfacings of gravel, coal tar concrete and brick. The gravel surfacing is excellent in dry weather but in damp becomes very soft and unsuitable. The gravel and dirt carried into the building by the children is a source of much discomfort in the class-room, and creates an unsanitary condition. Coal tar concrete pavement becomes brittle and in a short time the surface becomes very rough. It is neither easily nor economically repaired. It is very hard on the flesh and clothing of the children in falling. Brick pavement, which is used most in Boston, is the least expensive and most easily and economically repaired of the pavements in general use. It is not an ideal pavement by any means, as it is hard and rough. Cork asphalt pavement is a new pavement in this city, laid in a portion of the yard of the Phillips Brooks School. This pavement is composed of a base of soft coal cinders on which is placed a base of stone about 2 inches in diameter, coated with hot tar and rolled. On this is laid a binder course of small stones coated with hot tar and rolled. On this is spread the cork asphalt wearing surface composed of, by weight, cork one part, sand three parts, Trinidad asphalt three parts. This wearing surface is laid and rolled while hot. It gives practically a smooth and resilient surface. It seems at this time to be a success, overcoming many of the objections to the other pavements. It costs more than gravel and brick, but about the same as tar concrete.

APPENDIX XI.

The Heating and Ventilating Division is made up of a heating and ventilating engineer, superintendent of outside installation, inspector of minor repairs, superintendent of automatic control, and three draughtsmen.

The work consists in the preparation of plans and specifications for installing heating and ventilating apparatus in all new and old buildings, and in the supervision of the work under construction. In addition, the division has direct charge of all repairs on every piece of heating apparatus in the schools. Each year a systematic inspection is made of all the apparatus, after which plans and specifications are drawn up and estimates made to cover such items as retubing boilers, repairing furnaces, replacing and resetting boilers and replacing antiquated heating and ventilating systems with modern ones. It also makes its own repairs and adjustments on all the automatic control apparatus in the schoolhouse. For this purpose the superintendent of automatic control does nothing but repair and adjust these systems. During the past year the draughting force has prepared heating and ventilating plans and specifications for twelve new buildings, for the new boiler installations and for the remodeled systems which were installed during the summer and fall. The outside superintendents supervised the installation of heating and ventilating contracts amounting to \$125,000, as well as the minor repairs on old apparatus, amounting to \$55,000. In addition, this division is frequently called on to make tests to regulate the heating systems and to give proper instruction in the care and use of the apparatus.

The division now feels the necessity of having at hand more data obtained from various tests on the more modern systems of heating and ventilating installed in the schools. Tests made when the plant is operated under working conditions, that is, when the pupils are present in the class-rooms, would give data which would be valuable in the designing of all future systems.

Air circulation tests would give information which would enable us to decide definitely the proper size, number and location of heat and vent openings in standard class-rooms for complete distribution of air. More experimental study seems necessary to determine the benefits to comfort and health of pupils in schools supplied with air humidifying apparatus. Experiments have been made and should be continued in other buildings to obtain more practical information. The effect of introducing ozone into air supplied to certain class-rooms should be studied and its physical effects on the occupants carefully watched. This, of course, should necessarily be tried under medical supervision.

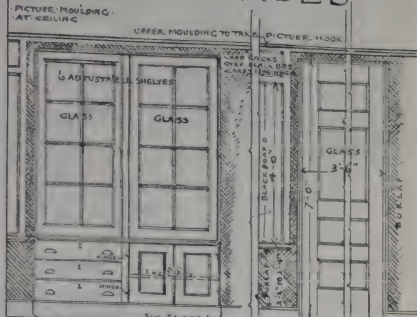
In view of the data already gathered from tests which the division has found time to make, and from a knowledge of the experience of other large cities, the continuance of the present policy of installing fan systems with automatic control in all schools where the size of the building will allow, is urgently recommended. These systems when correctly designed and operated under proper conditions assure success in obtaining for each room a positive tempered air distribution and a uniform inside temperature. The general use of the open window in schools where these systems are installed should be discouraged. There is always the danger of subjecting the pupils nearest the windows to both violent and rapid variations of temperature. Furthermore, this practice places the work of controlling the temperature and ventilation on the teacher instead of the janitor, to whom it belongs. It further destroys all chance for a constant inside temperature, as the temperature near the windows will be found to be several degrees lower than that on the other side of the room. Then, too, it destroys the balance of any fan system, as some rooms will receive more than the required amount of air, while others will be getting considerably less. In some of the older buildings, however, where the ventilating system is antiquated it might be well to allow a periodical air flushing of the rooms at certain intervals during the day.

It is to be hoped that during the coming fall and winter the division will, in addition to its regular work, be able to conduct various tests on selected buildings in order to obtain data bearing on the above.

STANDARDS OF GENERAL DETAIL

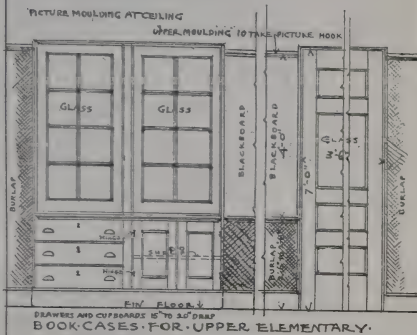
CITY OF BOSTON SCHOOLHOUSE DEPARTMENT

BOOK CASES



BOOK CASES FOR LOWER ELEMENTARY

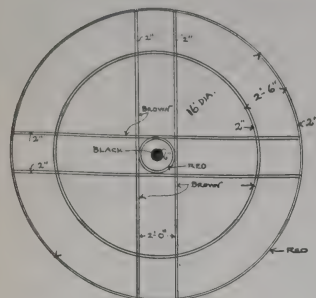
ALL DOORS AND DRAWERS TO LOCK



BOOK CASES FOR UPPER ELEMENTARY

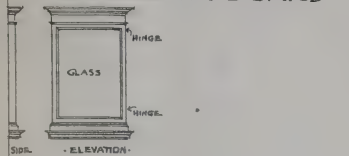
SCALE OF DETAIL

KINDERGARTEN CIRCLE

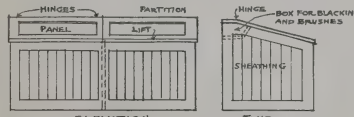


PLAN OF CIRCLE

BULLETIN BOARD

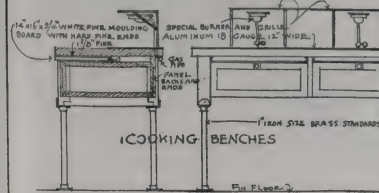


COAL AND WOOD BOX

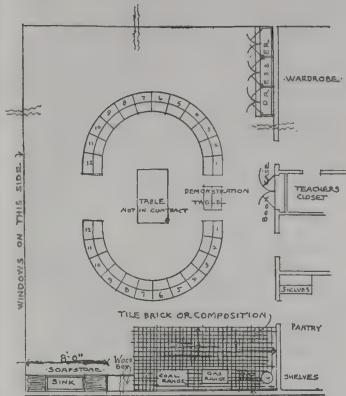


SCALE OF PLAN
SCALE OF DETAIL

COOKING ROOM AND FITTINGS

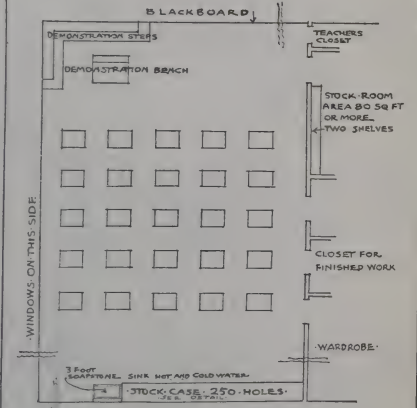


SECTION ELEVATION

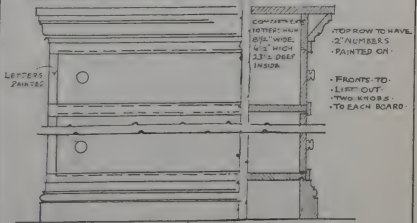


SCALE OF PLAN
SCALE OF DETAIL

MANUAL TRAINING ROOM



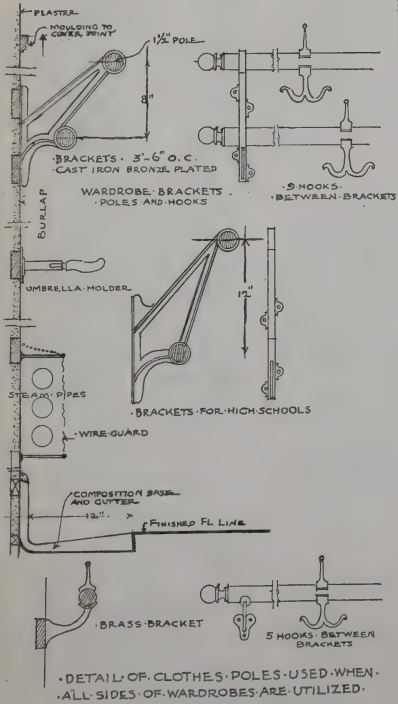
SECTIONAL CASES OF 30 COMPARTMENT EACH



DETAIL OF STOCK CASES

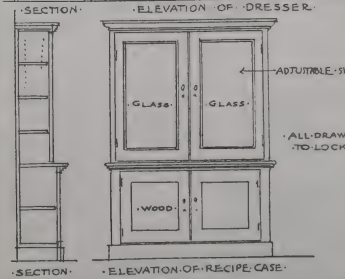
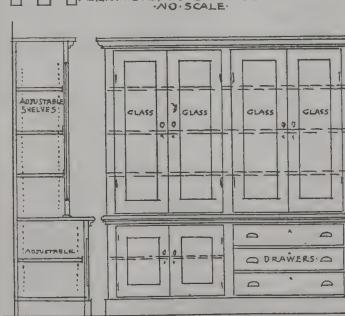
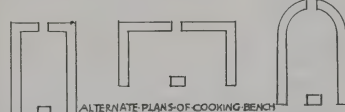
SCALE OF PLAN
SCALE OF DETAIL

WARDROBE FITTINGS



SCALE

COOKING ROOM FITTINGS



SCALE
DRAWN BY J. J. D.
APPROVED BY J. J. D.

1913

PLATE 1

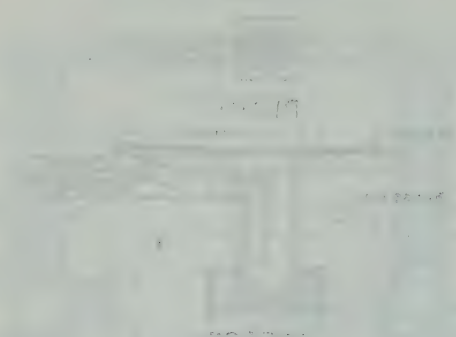


PLATE 2

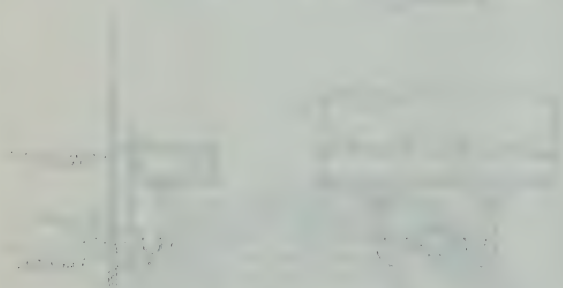
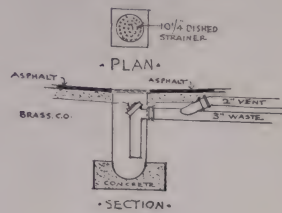


PLATE 3

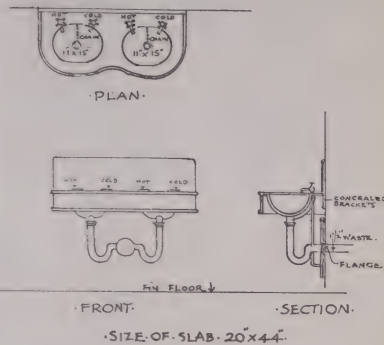
PLATE 4

PLUMBING STANDARDS

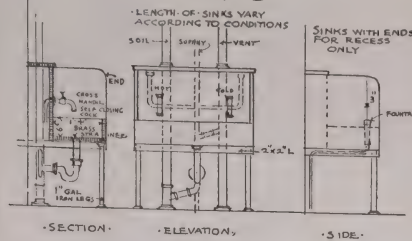
FLOOR WASH



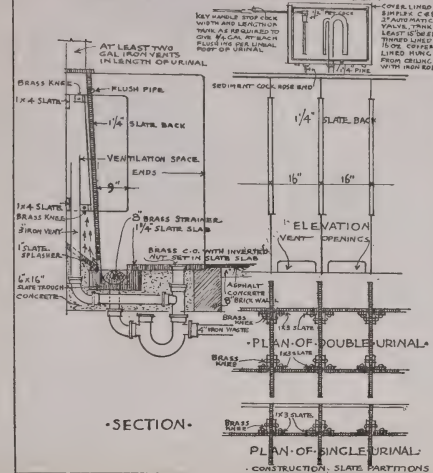
ENAMEL IRON LAVATORY BOWLS



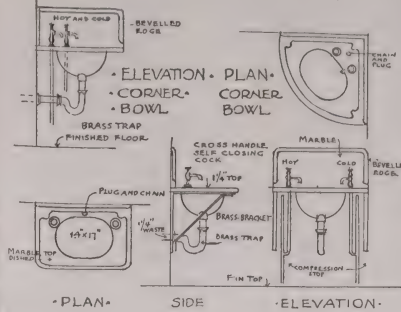
SLATE AND SOAPSTONE SINKS



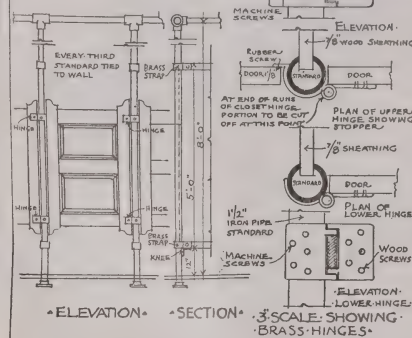
SLATE URINAL



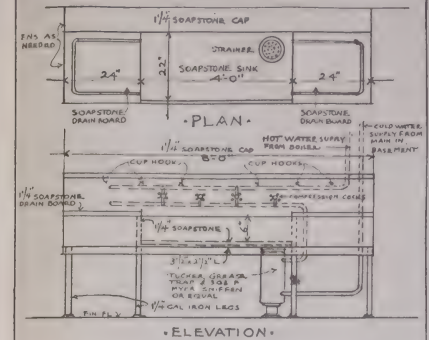
LAVATORY BOWLS



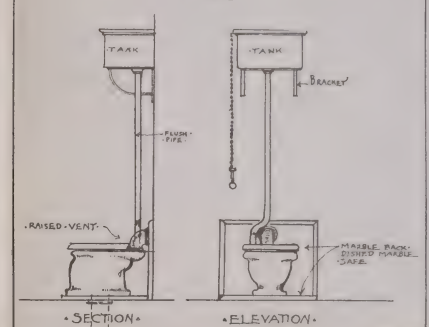
WATER CLOSET DOORS



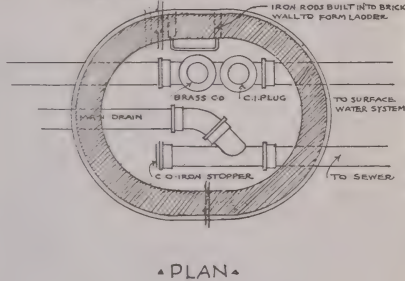
SOAPSTONE SINK COOKING ROOM



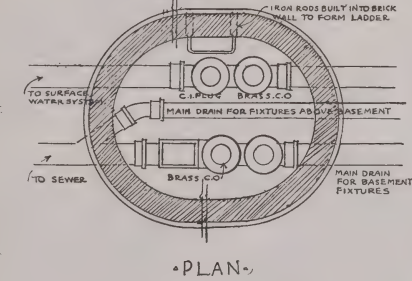
TEACHERS CLOSET



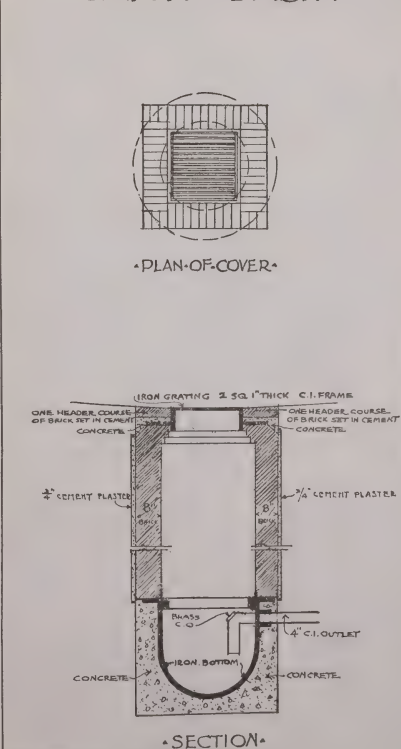
RUNNING TRAP



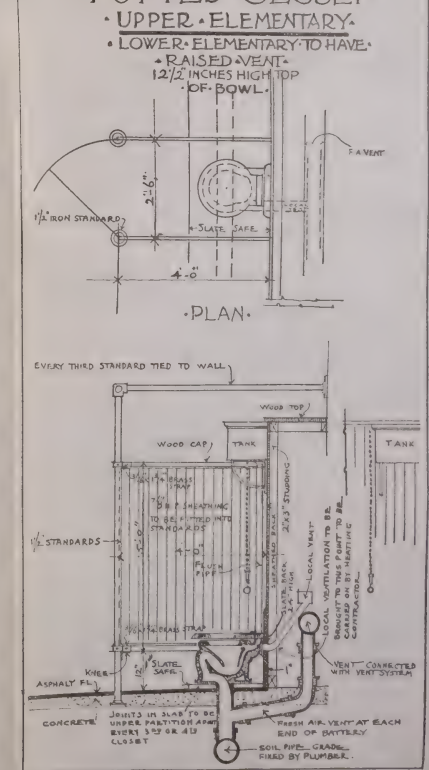
TIDE TRAP



CATCH BASIN



PUPILS CLOSET



• SCALE 0 1 2 3 4 5 6 7 8 ft. •

• MAN HOLE •

• CITY OF BOSTON •

• SCHOOLHOUSE •

• DEPARTMENT •

• DRAWN BY J. D. 1913 •
• CHECKED BY H. R. 1913 •
• APPROVED BY J. D. 1913 •

HIGH

SCHOOL

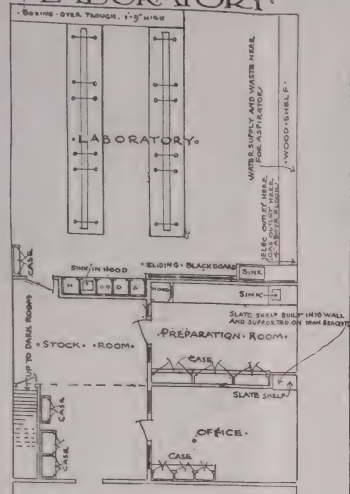
STANDARD

FITTINGS

CITY OF BOSTON
SCHOOLHOUSE DEPARTMENT

CHEMICAL

LABORATORY



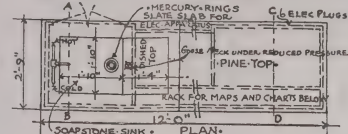
INSTRUCTORS TABLE



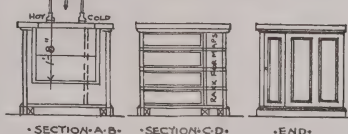
IN CHEMICAL



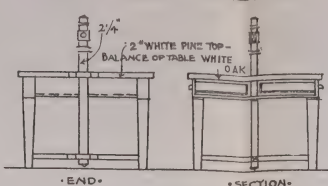
AND PHYSICAL



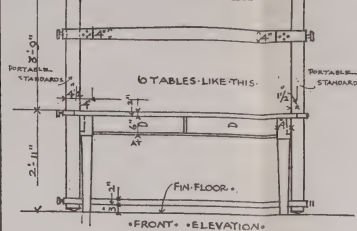
LABORATORIES



PUPILS TABLE

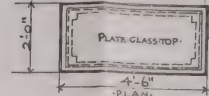


PHYSICAL

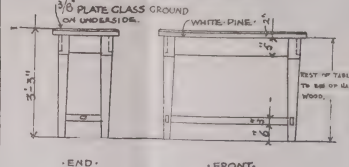


LABORATORY

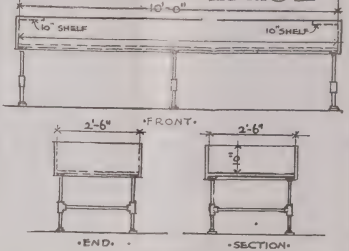
PUPILS TABLE
AND MARBLE SINK



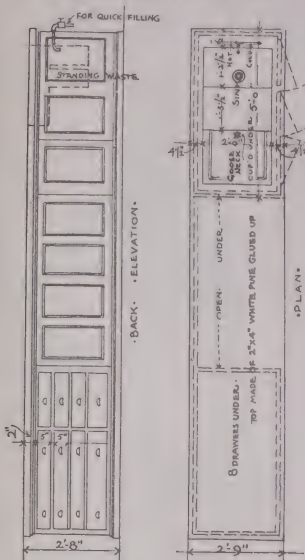
BOTANICAL



AND ZOOLOGICAL

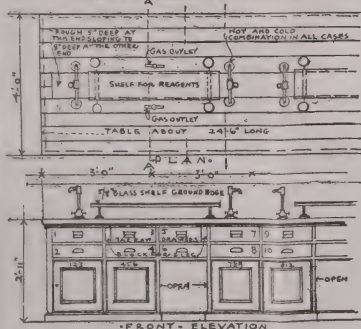


DEMONSTRATION TABLE

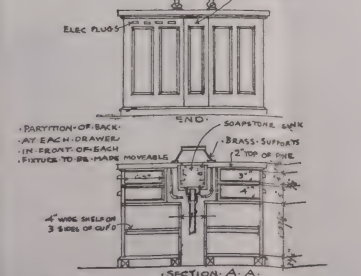


LECTURE ROOM

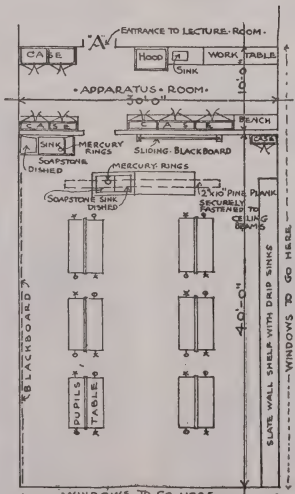
PUPILS TABLE



CHEMICAL LABORATORY

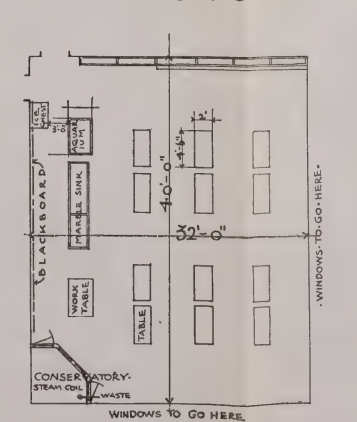


PHYSICAL



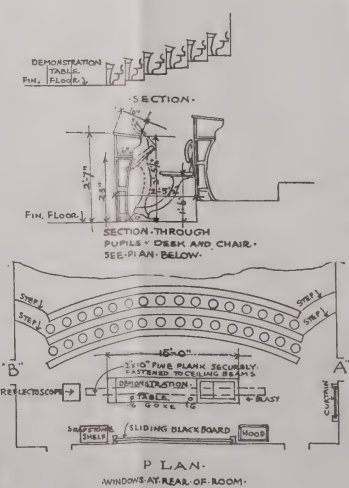
LABORATORY

BOTANICAL
AND
ZOOLOGICAL



LABORATORY
SOUTH EXPOSURE

LECTURE

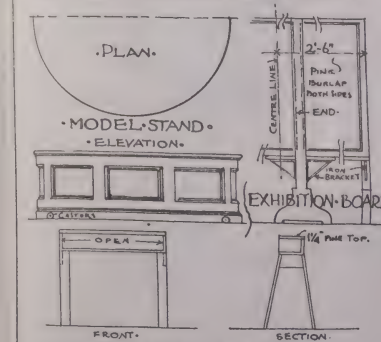


ROOM

DRAWING ROOM



CASE FOR DRAWING BOARDS



DUDILS TABLE

SCALE OF PLANS

SCALE OF DETAILS

DESCRIPTIVE SCHEDULE OF PERMANENT SCHOOL BUILDINGS

[illegible]



ANNUAL REPORT
OF THE
SINKING FUNDS DEPARTMENT
FOR THE YEAR 1913-14.

BOARD OF COMMISSIONERS OF SINKING FUNDS,
CITY HALL, March 19, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— The Board of Commissioners of Sinking Funds has the honor of presenting the following report, showing the transactions during the year ending January 31, 1914:

Amount of cash in treasury January 31, 1913	..	\$3,354,178	25
Receipts during the year	..	6,513,626	93
		<u>\$9,867,805</u>	18
Payments during the year	..	6,849,166	77
		<u>\$3,018,638</u>	41
Amount of cash January 31, 1914	..	\$3,018,638	41
Total amount of investments			
January 31, 1913	..	\$39,286,430	00
Investments purchased during			
the year	..	1,464,000	00
		<u>\$40,750,430</u>	00
Investments matured and can-			
celed during the year	..	3,290,000	00
		<u>37,460,430</u>	00
Amount of funds January 31, 1914	..	<u>\$40,479,068</u>	41

With this report will be found the annual report of the treasurer, together with detailed statements of the debts and funds.

Respectfully submitted,

JAMES W. DUNPHY,
Chairman.

BOSTON, February 2, 1914.

To the Board of Commissioners of Sinking Funds of the City of Boston:

GENTLEMEN,—The undersigned herewith presents his annual report as treasurer of the Board of Commissioners of Sinking Funds for the financial year 1913-14:

Balance of cash January 31, 1913.....			\$3,354,178 25
Receipts in 1913-14:			
Appropriation for debt.....	\$1,295,245 00		
Interest on bank deposits.....	52,795 22		
Interest on investments.....	1,407,451 62		
Investments canceled.....	326,000 00		
Investments matured.....	2,964,000 00		
Revenue from betterments, assessments, etc.....	243,311 05		
Revenue from Rapid Transit, rentals....	224,824 04		
			6,513,626 93
			\$9,867,805 18
Paid in 1913-14:			
City Treasurer:			
Cancellation of debt.....	\$326,000 00		
Redemption of debt.....	5,076,600 00		
		\$5,402,600 00	
Investments purchased.....		1,446,327 30	
Interest on investments purchased.....		239 47	
			6,849,166 77
Balance of cash January 31, 1914.....			<u>\$3,018,638 41</u>

DEBT LIABILITIES OF THE SINKING FUNDS JANUARY 31, 1914.

CLASSIFICATION OF DEBT.	Liabilities, Jan. 31, 1913.	Debt Issued, 1913-1914.	Debt Paid, 1913-1914.	Liabilities, Jan. 31, 1914.
Atlantic Avenue Extension.....	\$178,900 00	.....	.....	\$178,900 00
Blue Hill and Other Avenues...	2,260,000 00	.....	.....	2,260,000 00
Cambridge Bridge.....	1,352,900 00	.....	.....	1,352,900 00
Charles River Basin.....	800,000 00	.....	.....	800,000 00
Fifteen Year.....	1,300,000 00	.....	.....	1,300,000 00
Highways, Making of, No. 1...	3,919,001 00	.....	.....	3,919,001 00
Highways, Making of, No. 2...	7,013,000 00	.....	\$511,000 00	6,502,000 00
Improved Sewerage Special....	500,000 00	.....	.....	500,000 00
New Ferry Landing.....	500,000 00	.....	.....	500,000 00
New Public Library Special....	568,500 00	.....	.....	568,500 00
Public Park.....	5,136,410 98	.....	1,438,000 00	3,698,410 98
Public Park Special.....	10,852,500 00	.....	.....	10,852,500 00
Rapid Transit:				
Rapid Transit.....	4,416,000 00	.....	.....	4,416,000 00
Boston Tunnel and Subway..	8,256,700 00	.....	.....	8,256,700 00
Boylston Street Subway.....	2,005,000 00	\$2,300,000 00	.....	4,305,000 00
Cambridge Connection.....	1,450,000 00	.....	.....	1,450,000 00
Dorchester Tunnel.....	1,300,000 00	450,000 00	.....	1,750,000 00
East Boston Tunnel.....	3,243,000 00	.....	.....	3,243,000 00
East Boston Tunnel Extension.....	400,000 00	650,000 00	.....	1,050,000 00
Charlestown Bridge, No. 1...	750,000 00	.....	.....	750,000 00
Charlestown Bridge, No. 2...	805,000 00	.....	.....	805,000 00
Schoolhouses, No. 1.....	1,005,000 00	.....	.....	1,005,000 00
Schoolhouses, No. 2.....	13,426,600 00	.....	393,100 00	13,033,500 00
Separate Systems of Drainage, No. 1.....	3,300,000 00	.....	.....	3,300,000 00
Separate Systems of Drainage, No. 2.....	919,000 00	.....	.....	919,000 00
Sewerage Loan, No. 1.....	8,449,000 00	.....	.....	8,449,000 00
Sewerage Loan, No. 2.....	600,000 00	.....	.....	600,000 00
Stony Brook Improvement....	1,034,000 00	.....	.....	1,034,000 00
Twenty Year.....	15,411,969 02	.....	2,364,500 00	13,047,469 02
Thirty Year, No. 1.....	517,000 00	.....	.....	517,000 00
Thirty Year, No. 2.....	1,317,000 00	.....	.....	1,317,000 00
Suffolk County Courthouse....	2,921,000 00	.....	.....	2,921,000 00
Cochituate Water.....	2,748,450 00	.....	696,000 00	2,052,450 00
Totals.....	\$108,655,931 00	\$3,400,000 00	\$5,402,600 00	\$106,653,331 00

RESOURCES OF THE SINKING FUNDS JANUARY 31, 1914.

NAME OF SINKING FUND.	Cash.	Investments.	Total Resources.
Atlantic Avenue Extension.....	\$16,900 00	\$162,000 00	\$178,900 00
Blue Hill and Other Avenues.....	57,867 03	1,122,100 00	1,179,967 03
Cambridge Bridge.....	25,838 04	243,050 00	268,888 04
Charles River Basin.....	20,607 74	118,000 00	138,607 74
Fifteen Year.....	47,113 87	487,500 00	534,613 87
Highways, Making of, No. 1.....	52,233 69	1,052,000 00	1,104,233 69
Highways, Making of, No. 2.....	134,936 56	2,952,500 00	3,087,436 56
Improved Sewerage Special.....	25,251 23	394,500 00	419,751 23
New Ferry Landing.....	42,643 41	317,000 00	359,643 41
New Public Library, Special.....	25,406 15	427,600 00	453,006 15
Public Park.....	541,937 37	1,400,800 00	1,942,737 37
Public Park, Special.....	149,133 10	6,148,500 00	6,297,633 10
Rapid Transit Funds:			
Rapid Transit.....	50,436 58	1,544,000 00	1,594,436 58
Boston Tunnel and Subway.....	52,866 47	735,800 00	788,666 47
Boylston Street Subway.....	494 59	1,000 00	1,494 59
Cambridge Connection.....	15,423 61	42,000 00	57,423 61
East Boston Tunnel.....	190,235 99	487,000 00	677,235 99
Charlestown Bridge, No. 1.....	40,861 73	192,000 00	232,861 73
Charlestown Bridge, No. 2.....	67,514 28	196,600 00	264,114 28
Schoolhouses, No. 1.....	22,449 26	253,000 00	275,449 26
Schoolhouses, No. 2.....	426,153 31	2,912,500 00	3,338,653 31
Separate Systems of Drainage, No. 1....	84,297 49	575,000 00	659,297 49
Separate Systems of Drainage, No. 2....	22,337 86	101,000 00	123,337 86
Sewerage Loan, No. 1.....	187,298 41	3,202,480 00	3,389,778 41
Sewerage Loan, No. 2.....	34,552 95	53,000 00	87,552 95
Stony Brook Improvement.....	30,043 68	499,900 00	529,943 68
Twenty Year.....	231,376 47	8,036,780 00	8,268,156 47
Thirty Year, No. 1.....	16,836 07	170,600 00	187,436 07
Thirty Year, No. 2.....	90,618 21	201,000 00	291,618 21
Suffolk County Courthouse.....	108,828 90	1,539,500 00	1,648,328 90
Cochituate Water.....	162,543 42	1,791,720 00	1,954,263 42
Moneys for reduction of debt.....	43,600 94	100,000 00	143,600 94
Total Resources January 31, 1914...	\$3,018,638 41	\$37,460,430 00	\$40,479,068 41

CASH ON DEPOSIT IN NATIONAL BANKS AND TRUST COMPANIES.

NATIONAL BANKS.		
Boylston National Bank.....	\$66,181 64	
Commercial National Bank.....	73,102 61	
First National Bank.....	164,157 35	
First Ward National Bank.....	55,682 86	
Fourth-Atlantic National Bank.....	103,566 17	
National Bank of Commerce.....	129,543 66	
" Rockland Bank.....	73,683 92	
" Security Bank.....	54,600 51	
" Shawmut Bank.....	164,628 86	
" Union Bank.....	108,797 68	
Old Boston National Bank.....	107,363 37	
Peoples National Bank.....	73,988 95	
Second National Bank.....	163,285 84	
Webster and Atlas National Bank.....	106,278 23	
Winthrop National Bank.....	76,495 03	
Merchants National Bank.....	168,969 33	\$1,690,326 01
TRUST COMPANIES.		
American Trust Company.....	\$108,817 82	
Bay State Trust Company.....	86,189 03	
Beacon Trust Company.....	98,846 03	
Boston Safe Deposit and Trust Company.....	136,926 76	
Columbia Trust Company.....	24,819 82	
Commonwealth Trust Company.....	138,459 49	
Cosmopolitan Trust Company.....	10,005 48	
Exchange Trust Company.....	10,039 75	
Federal Trust Company.....	130,725 05	
Hamilton Trust Company.....	9,757 65	
Liberty Trust Company.....	20,487 05	
Market Trust Company.....	37,532 80	
Mattapan Deposit and Trust Company.....	32,134 30	
New England Trust Company.....	113,684 60	
Old Colony Trust Company.....	164,342 25	
Puritan Trust Company.....	27,739 85	
State Street Trust Company.....	99,699 18	
United States Trust Company.....	78,105 49	1,328,312 40
Total Deposits January 31, 1914.....		<u>\$3,018,638 41</u>

STATEMENT OF CASH AND INVESTMENTS FOR THE
FINANCIAL YEAR 1913-14.

Total cash resources January 31, 1914.....		\$3,018,638 41	
Investments January 31, 1914:			
City of Boston 4% Bonds.....	\$12,638,850 00		
" " 3½% " 	19,445,680 00		
" " 3¼% " 	29,000 00		
" " 3% " 	3,451,900 00		
Commonwealth of Massachusetts 3½% Bonds.....	500,000 00		
County of Suffolk 4% Bonds.....	859,000 00		
" " 3½% " 	162,000 00		
" " 3% " 	374,000 00		
		37,460,430 00	
			\$40,479,068 41

INVESTMENT ACCOUNT.

Amount of investments January 31, 1913, ...	\$39,286,430 00		
Purchased in 1913-14:			
City of Boston 4% Bonds.....	\$149,000 00		
" " 3½% " 	28,000 00		
Cochituate Water 4% Bonds.....	81,000 00		
" " 3¼% " 	206,000 00		
Temporary Loan 4%.....	1,000,000 00		
		1,464,000 00	
Matured and canceled in 1913-14:			\$40,750,430 00
City of Boston 4% Bonds.....	\$1,919,000 00		
" " 3¼% " 	67,000 00		
Cochituate Water 4% Bonds.....	81,000 00		
" " 3¼% " 	206,000 00		
County of Suffolk 3% Bonds.....	17,000 00		
Temporary Loan 4%.....	1,000,000 00		
		\$3,290,000 00	
			3,290,000 00
Amount of investments January 31, 1914, ...			\$37,460,430 00

INCREASE OR DECREASE OF SINKING FUNDS FOR
FINANCIAL YEAR 1913-14.

Amount of Sinking Funds January 31, 1913, ...			\$42,640,608 25
Increase:			
Appreciation of investments.....		\$17,672 70	
Appropriation for debt.....		1,295,245 00	
Interest on bank deposits.....		52,795 22	
Interest on investments.....		1,407,451 62	
Revenue from betterments, assessments, etc.		468,135 09	
			3,241,299 63
			\$45,881,907 88
Decrease:			
City Treasurer:			
Cancellation of debt.....	\$326,000 00		
Redemption of debt.....	5,076,600 00		
		\$5,402,600 00	
Interest on investments purchased.....		239 47	
			5,402,839 47
Amount of Sinking Funds January 31, 1914, ...			<u>\$40,479,068 41</u>

Respectfully submitted, .
CHARLES H. SLATTERY,
Treasurer.

CITY HALL, March 5, 1914.

The Committee on Investments of this Board, appointed to examine the investments of the Sinking Funds, having completed its examination, report it finds the amount as stated by the treasurer, viz., \$37,460,430, is correct.

JAMES W. DUNPHY.

JAMES T. WETHERALD.

JOHN W. O'MEALEY.

SINKING FUND DEBT OF THE CITY OF BOSTON,

Issued WITHIN THE DEBT LIMIT fixed by Section 3 of
Chapter 27 of the Revised Laws.

FIFTEEN-YEAR DEBT AND SINKING FUND.

FIFTEEN-YEAR SINKING FUND DEBT.

"Fifteen-Year Debt" of the City of Boston, to be paid as it becomes due from the resources of the "Fifteen-Year Sinking Fund." The dates show when the debt becomes due.

1921.	July	1.	Street Improvements,	4	\$500,000 00	
	"	1.	Columbus Avenue, Asphaltting,	4	150,000 00	
1922.	Jan.	1.	Street Improvements,	3½	250,000 00	
	July	1.	Street Improvements,	4		\$900,000 00
						400,000 00
			Total Debt,			<u>\$1,300,000 00</u>

FIFTEEN-YEAR SINKING FUND.

Resources of the "Fifteen-Year Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1916.	Jan.	1.	Various Municipal Purposes,	4	\$5,000 00	
	Oct.	1.	Charles River Embankment,	3½	55,000 00	
1918.	Jan.	1.	New Ferry Landing,	3½	60,000 00	
1919.	July	1.	New Ferry Landing,	3½	45,000 00	
	"	1.	Various Municipal Purposes,	3½	25,000 00	
	Dec.	1.	Faneuil Hall Building, Reconstruction,	3½	1,500 00	
1921.	July	1.	Street Improvements,	4	62,000 00	
1922.	Jan.	1.	Street Improvements,	3½	12,000 00	
	June	1.	Various Municipal Purposes,	3½	5,000 00	
	July	1.	Street Improvements,	4	36,000 00	
1927.	July	1.	Various Municipal Purposes,	4	5,000 00	
1930.	Jan.	1.	Laying Out and Construction of Highways,	3½	16,000 00	
1932.	June	1.	Broadway Bridge, Rebuilding,	3½	40,000 00	
1934.	Jan.	1.	Charles River Basin,	3½	120,000 00	
			Investments,		\$487,500 00	
			Cash,		47,113 87	
			Total Resources,			<u>\$534,613 87</u>

HIGHWAYS, MAKING OF, DEBT AND SINKING FUND, No. 1.

HIGHWAYS, MAKING OF, SINKING FUND DEBT, No. 1.

"Highways, Making of, Debt" of the City of Boston, to be paid as it becomes due from the resources of the "Highways, Making of, Sinking Fund, No. 1." The dates show when the debt becomes due.

1922.	June	1.	Construction of Highways already laid out,	3½	\$300,000 00	
	"	1.	Laying Out and Construction of Highways,	3½	200,000 00	
	Oct.	1.	Laying Out and Construction of Highways,	3½	3,700 00	
			Total, Financial Year, 1922-23,			\$503,700 00
1927.	July	1.	Highways, Making of,	4	250,000 00	
1929.	April	1.	Highways, Making of,	3½	250,000 00	
			Carried forward,			<u>\$1,003,700 00</u>

<i>Brought forward,</i>							\$1,003,700 00
1931.	April	1.	Laying out and Construction of Highways (chapter 478, Acts 1900),	3	\$300,000 00		
	July	1.	Laying Out and Construction of Highways (chapter 478, Acts 1900),	3½	500,000 00		
	"	1.	Construction of Highways already laid out,	3½	100,000 00		
	Oct.	1.	Laying Out and Construction of Highways (chapter 478, Acts 1900),	3	100,000 00		
	"	1.	Laying Out and Construction of New Highways,	3	100,000 00		
1932.	Jan.	1.	Laying Out and Construction of New Highways,	3	83,000 00		
	"	1.	Laying Out and Construction of Highways (chapter 478, Acts 1900),	3	126,000 00		
Total, Financial Year, 1931-32,							1,309,000 00
1932.	April	1.	Laying Out and Construction of Highways,	3	\$56,300 00		
	June	1.	Laying Out and Construction of Highways,	3½	195,000 00		
	Oct.	1.	Laying Out and Construction of Highways (chapter 478, Acts 1900),	3½	5,001 00		
Total, Financial Year, 1932-33,							256,301 00
1934.	June	1.	Highways, Making of (chapter 199, Acts 1901),	3½		600,000 00	
1935.	Dec.	1.	Highways, Making of (chapter 199, Acts 1901),	3½		250,000 00	
1936.	July	1.	Highways, Making of,	4		500,000 00	
Total Debt,							<u>\$3,919,001 00</u>

HIGHWAYS, MAKING OF, SINKING FUND, No. 1.

Resources of the "Highways, Making of, Sinking Fund, No. 1," being Bonds and Cash. The dates show when the Bonds become due.

1916.	Oct.	1.	Public Bath House,	4		\$64,000 00	
1917.	July	1.	Various Municipal Purposes, Nov. 4, 1896,	4		253,000 00	
1921.	July	1.	Malden Bridge,	3½		50,000 00	
1922.	June	1.	Laying Out and Construction of Highways,	3½	\$6,000 00		
	July	1.	Street Improvements,	4	71,000 00		
						77,000 00	
1925.	Oct.	1.	Public Park, Wards 6 and 7,	4		100,000 00	
1928.	Jan.	1.	Laying Out and Construction of Highways,	3½		1,000 00	
1930.	Oct.	1.	Schoolhouses,	3		10,000 00	
1931.	April	1.	Laying Out and Construction of Highways,	3	\$10,000 00		
	July	1.	Schoolhouses,	3½	19,000 00		
	Oct.	1.	Laying Out and Construction of Highways,	3	100,000 00		
	"	1.	Laying Out and Construction of New Highways,	3	50,000 00		
						179,000 00	
1932.	June	1.	Laying Out and Construction of Highways,	3½	\$50,000 00		
	Dec. 31.		Highways, Making of,	3½	87,000 00		
						137,000 00	
1934.	Jan.	1.	Public Parks,	3½		50,000 00	
1935.	Dec.	1.	Highways, Making of,	3½		7,000 00	
1936.	June	1.	Playground, Wards 7 and 9,	3½		73,000 00	
1937.	July	1.	Sewerage Loan,	4		5,000 00	
1947.	April	1.	Boston Tunnel and Subway,	4		12,000 00	
							<u>\$1,018,000 00</u>

SERIAL BONDS.

Due July 1, 1914-15, \$1,000 annually.	V. M. P., Bath House,	4	\$2,000 00	
Due " 1, 1914-20, \$1,000 annually.	Orient Heights,			
	V. M. P., Consumptives' Hospital, completion of second ward,	4	7,000 00	
Due " 1, 1914-15, \$2,000 annually.	V. M. P., Consumptives' Hospital, Cottage Ward for Women,	4	4,000 00	
<i>Carried forward,</i>			<u>\$13,000 00</u>	<u>\$1,018,000 00</u>

SINKING FUNDS DEPARTMENT.

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<i>Brought forward,</i>				\$13,000 00	\$1,018,000 00
Due July 1, 1916-20,	\$1,000 annually.	V. M. P., Consump-			
		tives' Hospital, Cot-			
		tage Ward for			
		Women,	4	5,000 00	
Due " 1, 1914-15,	\$2,000 annually.	V. M. P., Fire Station,			
		Oak Square and			
		Faneuil Section,			
		Ward 25,	4	4,000 00	
Due " 1, 1916-20,	\$1,000 annually.	V. M. P., Fire Station,			
		Oak Square and			
		Faneuil Section,			
		Ward 25,	4	5,000 00	
Due " 1, 1914-20,	\$1,000 annually.	Washington Street,			
		West Roxbury,	4	7,000 00	
					34,000 00
Investments,					\$1,052,000 00
Cash,					52,233 69
Total Resources,					
					\$1,104,233 69

PUBLIC PARK DEBT SINKING FUND.

PUBLIC PARK SINKING FUND DEBT.

"Public Park Debt" of the City of Boston, to be paid as it becomes due from the resources of the "Public Park Sinking Fund." The dates show when the debt becomes due.

1914.	April	1.	Muddy River Improvement,	4	\$75,000 00	
	Oct.	1.	Public Parks,	4	500,000 00	
Total, Financial Year, 1914-15,						\$575,000 00
1915.	Oct.	1.	City Point Park,	3½	\$13,000 00	
	"	1.	Charles River Embankment,	3½	16,000 00	
1916.	Jan.	1.	Strandway, from Marine Park, West,	4	7,000 00	
	"	1.	Public Park Construction,	4	100,000 00	
Total, Financial Year, 1915-16,						136,000 00
1916.	April	1.	Bussey Park and Arnold Arboretum,	3½	\$20,000 00	
	"	1.	Strandway, from Marine Park, West,	4	3,000 00	
	July	1.	Strandway, from Marine Park, West,	4	90,000 00	
	"	1.	Playstead, Neponset,	4	15,000 00	
	Oct.	1.	Charles River Embankment,	3½	55,000 00	
	Nov. 30.	1.	Playground, Fellows Street,	4	2,000 00	
	"	3.	Playground, First Street,	4	5,000 00	
1917.	Jan.	1.	Playground, Freeport Street,	4	4,000 00	
Total, Financial Year, 1916-17,						194,000 00
1917.	April	1.	Playground, Billings Field,	4	\$2,000 00	
	July	1.	Playground, Billings Field,	4	18,000 00	
	"	1.	Playground, North End,	4	100,000 00	
	"	1.	Playground, Gibson Street,	3½	37,500 00	
	"	1.	Playground, Ward 3,	3½	50,000 00	
	Oct.	1.	Playground, Billings Field, Construction,	4	2,500 00	
	"	1.	Playground, Fellows Street, Additional Land,	4	15,000 00	
	"	1.	Playground, Neponset, Construction,	4	4,500 00	
	"	1.	Playground, Ward 14,	4	5,000 00	
Total, Financial Year, 1917-18,						234,500 00
1919.	April	1.	Various Playgrounds,	3½	\$37,500 00	
	Dec.	1.	Playgrounds, Billings Field,	3½	27,060 98	
Total, Financial Year, 1919-20,						64,560 98
1921.	Jan.	1.	Playground Construction,	3	\$25,000 00	
	"	1.	Speedway, Franklin Park,	3	25,000 00	
Total, Financial Year, 1920-21,						50,000 00
1921.	July	1.	Public Parks,	3½	\$21,000 00	
	Oct.	1.	Strandway, Purchase of Land, etc.,	3	50,000 00	
<i>Carried forward,</i>						\$71,000 00
						\$1,254,060 98

<i>Brought forward,</i>					\$71,000 00	\$1,254,060 98
1921.	Oct.	1.	Billings Field, Construction,	3	10,000 00	
1922.	Jan.	1.	Gymnasium, First Street Playground,	3	9,550 00	
Total, Financial Year, 1921-22,						90,550 00
1922.	June	1.	Strandway, Purchase of Land, etc.,	3½	\$75,000 00	
	Oct.	1.	Public Parks,	3½	25,000 00	
1923.	Jan.	1.	Public Parks,	3½	30,000 00	
	"	1.	Playground, Ward 2,	3½	25,000 00	
Total, Financial Year, 1922-23,						155,000 00
1923.	April	1.	Charlestown Playground, "Gym.," etc.,	3½	\$7,500 00	
	"	1.	Mystic Playground, "Gym.," etc.,	3½	2,500 00	
	"	1.	Columbus Avenue Playground, Sanitary, etc.,	3½	10,000 00	
	"	1.	Ashmont Playground, Grading, etc.,	3½	4,000 00	
	"	1.	Dorchester Park, Open-air Gymnasium,	3½	2,000 00	
	"	1.	Neponset Playground, Sanitary, etc.,	3½	5,000 00	
	"	1.	First Street Playground, House, etc.,	3½	6,000 00	
	"	1.	Castle Island, Sanitary,	3½	3,000 00	
	"	1.	Wood Island Park, Sanitary and Shelter,	3½	10,000 00	
	June	1.	Strandway, Purchase of Land, etc.,	3½	100,000 00	
	"	1.	Public Parks and Construction,	3½	100,000 00	
	Oct.	1.	Playground, Wards 7 and 9,	3½	30,000 00	
Total, Financial Year, 1923-24,						280,000 00
1924.	July	1.	Public Park, Wards 6 and 7,	4	\$100,000 00	
	Oct.	1.	Public Park, Wards 6 and 7,	4	100,000 00	
Total, Financial Year, 1924-25,						200,000 00
1925.	April	1.	Public Park, Wards 6 and 7,	4	\$50,000 00	
	Oct.	1.	Public Park, Wards 6 and 7,	4	208,000 00	
	Dec.	1.	Strandway, Purchase of Land, etc.,	3½	13,000 00	
1926.	Jan.	1.	Commonwealth Park, Sanitary, etc.,	3½	10,000 00	
Total, Financial Year, 1925-26,						281,000 00
1926.	July	1.	Public Park, Wards 6 and 7,	4	\$11,300 00	
1927.	Jan.	1.	Strandway, Purchase of Land, etc.,	3½	3,500 00	
Total, Financial Year, 1926-27,						14,800 00
1927.	July	1.	Charlestown Playground, "Gym.," etc.,	4	\$3,000 00	
	"	1.	First Street Playground, "Gym.," etc.,	4	4,500 00	
	"	1.	Franklin Field, Locker Building, etc.,	4	25,000 00	
	"	1.	Charlesbank, Addition to Building, etc.,	4	5,000 00	
	"	1.	Savin Hill Playground, Grading, etc.,	4	5,000 00	
	"	1.	Marcella Street Playground, "Gym.," etc.,	4	4,500 00	
	"	1.	Cottage Street Playground, "Gym.," etc.,	4	5,000 00	
	"	1.	Savin Hill Park,	4	35,000 00	
Total, Financial Year, 1927-28,						87,000 00
1929.	April	1.	Playgrounds,	3½	\$151,000 00	
	July	1.	Playgrounds,	3½	49,000 00	
1930.	Jan.	1.	Chestnut Hill Park,	3½	75,000 00	
Total, Financial Year, 1929-30,						275,000 00
1930.	July	1.	Playgrounds,	3	\$154,000 00	
	"	1.	Playgrounds,	3½	46,000 00	
1931.	Jan.	1.	Public Park Construction,	3	100,000 00	
Total, Financial Year, 1930-31,						300,000 00
1932.	Jan.	1.	Public Parks,	3		131,000 00
1932.	June	1.	Playgrounds,	3½	\$100,000 00	
	"	1.	Chestnut Hill Park,	3½	75,000 00	
	July	1.	Playground, Ward 2,	3½	5,000 00	
	"	1.	Public Parks,	3½	5,000 00	
	Oct.	1.	Playground, Ward 2,	3½	20,000 00	
1933.	Jan.	1.	Parks, Brighton,	3½	25,000 00	
Total, Financial Year, 1932-33,						230,000 00
1934.	Oct.	1.	Chestnut Hill Park,	3½	\$36,300 00	
	"	1.	Strandway, Purchase of Land and Construction of,	3½	63,700 00	
<i>Carried forward,</i>					\$100,000 00	\$3,298,410 98

SINKING FUNDS DEPARTMENT.

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<i>Brought forward,</i>					\$100,000 00	\$3,298,410 98
1935.	Jan.	1.	Playground, Wards 7 and 9,	3½	100,000 00	
	"	1.	Playground, Ward 22,	3½	30,000 00	
Total, Financial Year, 1934-35,						230,000 00
1936.	June	1.	Playground, Wards 7 and 9,	3½		170,000 00
Total Debt,						<u>\$3,698,410 98</u>

PUBLIC PARK SINKING FUND.

Resources of the "Public Park Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1914.	Oct.	1.	Public Parks,	4		\$10,000 00
1917.	July	1.	Public Parks,	3½		2,000 00
1919.	Jan.	1.	Public Park Construction,	4		25,000 00
1919.	July	1.	Laying Out and Construction of Highways,	3½	\$4,000 00	
1920.	Jan.	1.	Public Parks,	3½	2,000 00	
						6,000 00
1921.	June	1.	Public Parks,	4		25,000 00
1922.	April	1.	Public Park Loan,	4	\$20,000 00	
	June	1.	Garbage Plant, Spectacle Island,	3½	50,000 00	
	"	1.	Laying Out and Construction of Highways,			
			Various Municipal Purposes,	3½	11,000 00	
	July	1.	Street Improvements,	4	21,000 00	
	Oct.	1.	Public Parks,	4	26,000 00	
1923.	Jan.	1.	Public Parks,	4	15,000 00	
	"	1.	Public Parks,	3½	30,000 00	
	"	1.	Playground, Ward 2,	3½	25,000 00	
						198,000 00
1923.	July	1.	Public Parks,	4	\$3,000 00	
	Nov.	1.	Commonwealth of Massachusetts,	3½	3,000 00	
						6,000 00
1924.	April	1.	Commonwealth of Massachusetts,	3½	\$1,000 00	
	Oct.	1.	Public Park Loan,	4	50,000 00	
						51,000 00
1925.	April	1.	Public Park, Wards 6 and 7,	4		50,000 00
1926.	July	1.	Public Park, Wards 6 and 7,	4	\$11,300 00	
1927.	Jan.	1.	Strandway, Purchase of Land, etc.,	3½	3,500 00	
						14,800 00
1927.	April	1.	Bath House, McKenzie Beach,	4	\$5,000 00	
	"	1.	Emergency Hospital, East Boston,	4	28,000 00	
	July	1.	Savin Hill Park,	4	35,000 00	
1928.	Jan.	1.	Public Parks,	3½	103,000 00	
						171,000 00
1928.	April	1.	Public Parks,	3½	\$50,000 00	
	Oct.	1.	Public Parks,	3½	34,000 00	
						84,000 00
1929.	April	1.	Playgrounds,	3½	\$151,000 00	
	May	1.	Commonwealth of Massachusetts,	3½	5,000 00	
1930.	Jan.	1.	Commonwealth of Massachusetts,	3½	7,000 00	
						163,000 00
1930.	July	1.	Public Parks,	3½	\$50,000 00	
	"	1.	Playgrounds,	3½	46,000 00	
						96,000 00
1933.	Jan.	1.	Parks, Brighton,	3½		25,000 00
1933.	April	1.	Commonwealth of Massachusetts,	3½	\$1,000 00	
	May	1.	Commonwealth of Massachusetts,	3½	10,000 00	
1934.	Jan.	1.	Hyde Park Avenue,	3½	180,000 00	
						191,000 00
1934.	Oct.	1.	Chestnut Hill Park,	3½	\$36,300 00	
	"	1.	Strandway, Purchase of Land, etc.,	3½	63,700 00	
1935.	Jan.	1.	Playground, Wards 7 and 9,	3½	75,000 00	
						175,000 00
1936.	June	1.	Playground, Wards 7 and 9,	3½		16,000 00
1937.	July	1.	Sewerage Loans,	4		21,000 00
1938.	July	1.	Blue Hill and Other Avenues,	3½		33,000 00
<i>Carried forward,</i>						<u>\$1,362,800 00</u>

Brought forward,

\$1,362,800 00

SERIAL BONDS.

Due July 1, 1914-15, \$2,000 annually.	V. M. P., Public Park Playground, Ward 7,	4	\$4,000 00	
Due " 1, 1916-30, \$1,000 annually.	V. M. P., Public Park Playground, Ward 7,	4	15,000 00	
Due " 1, 1914-15, \$2,000 annually.	V. M. P., Public Park Playground, Ward 16,	4	4,000 00	
Due " 1, 1916-30, \$1,000 annually.	V. M. P., Public Park Playground, Ward 16,	4	15,000 00	
				38,000 00
Investments,				\$1,400,800 00
Cash,				541,937 37
Total resources,				<u>\$1,942,737 37</u>

RAPID TRANSIT LOAN, CHARLESTOWN BRIDGE, DEBT AND
SINKING FUND, No. 1.

RAPID TRANSIT LOAN, CHARLESTOWN BRIDGE, SINKING FUND DEBT, No. 1.

"Rapid Transit Loan, Charlestown Bridge, Debt," issued under chapter 548, Acts of 1894, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Rapid Transit Loan, Charlestown Bridge, Sinking Fund, No. 1." The dates show when the debt becomes due.

1934. Oct. 1.	Charlestown Bridge,	4		\$10,000 00
1935. Oct. 1.	Charlestown Bridge,	4		10,000 00
1936. July 1.	Charlestown Bridge,	4	\$30,000 00	
Oct. 1.	Charlestown Bridge,	4	100,000 00	
				130,000 00
1937. July 1.	Charlestown Bridge,	3½	\$500,000 00	
1938. Jan. 1.	Charlestown Bridge,	3½	100,000 00	
				600,000 00
Total Debt,				<u>\$750,000 00</u>

RAPID TRANSIT LOAN, CHARLESTOWN BRIDGE, SINKING FUND, No. 1.

Resources of the "Rapid Transit Loan, Charlestown Bridge, Sinking Fund, No. 1," being Bonds and Cash. The dates show when the Bonds become due.

1921. July 1.	Various Municipal Purposes, June 3, 1901,	3½		\$32,000 00
1934. Jan. 1.	Brandon Street and Belgrade Avenue,	3½		30,000 00
1936. June 1.	Playground, Wards 7 and 9,	3½		12,000 00
1937. July 1.	Charlestown Bridge,	3½		34,000 00
" " 1.	Land and Buildings for Schools,	4		22,000 00
" " 1.	Rapid Transit,	3½		5,000 00
1938. July 1.	Blue Hill and Other Avenues,	3½		13,000 00
1942. Jan. 1.	Rapid Transit,	3		1,000 00
" " 1.	Rapid Transit, Charlestown Bridge,	3		5,000 00
1945. Jan. 1.	Cambridge Bridge,	3½		14,000 00
1947. April 1.	Boston Tunnel and Subway,	4		14,000 00
1957. July 1.	East Boston Tunnel,	4		10,000 00
Investment,				\$192,000 00
Cash,				40,861 73
Total resources,				<u>\$232,861 73</u>

SCHOOLHOUSES DEBT AND SINKING FUND, No. 2.

SCHOOLHOUSES SINKING FUND DEBT, No. 2.

"Schoolhouses Debt" of the City of Boston, issued under chapter 408, Acts of 1895, chapter 442, Acts of 1897, chapter 149, Acts of 1898, chapters 288 and

473, Acts of 1901, chapter 386, Acts of 1902, and chapter 450, Acts of 1907, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Schoolhouses Sinking Fund, No. 2."

1914.	Oct.	1.	Mechanic Arts High School, Furnishing,	4	\$25,000 00	
	"	1.	Primary Schoolhouse, Field's Corner, Site and Building,	4	50,000 00	
	"	1.	Primary Schoolhouse, Genesee Street,	4	65,000 00	
	"	1.	Primary Schoolhouse, Aberdeen District, Site,	4	6,000 00	
	"	1.	Agassiz Schoolhouse, etc.,	4	9,000 00	
	"	1.	Austin Primary Schoolhouse,	4	5,000 00	
	"	1.	Brighton High Schoolhouse,	4	35,000 00	
	"	1.	Cushman Schoolhouse, Enlargement of,	4	36,000 00	
	"	1.	Grammar Schoolhouse, Bowdoin District, Site and Building,	4	30,000 00	
	"	1.	Grammar Schoolhouse, Gibson District,	4	10,000 00	
	"	1.	Grammar Schoolhouse, Stoughton District, Site,	4	15,000 00	
	"	1.	Grammar Schoolhouse, Stoughton District, Building,	4	90,000 00	
	"	1.	Primary Schoolhouse, Morton Street,	4	9,000 00	
	"	1.	Primary Schoolhouse, North of Broadway,	4	8,000 00	
	"	1.	Primary Schoolhouse, Oak Square, etc.,	4	3,000 00	
Total, Financial Year, 1914-15,						\$396,000 00
1915.	April	1.	Cudworth Schoolhouse, Additional Land,	4	\$5,000 00	
	"	1.	Primary Schoolhouse, Eustis Street, Grading Grounds,	4	7,000 00	
	"	1.	Primary Schoolhouse, Moulton Street, Additional Land,	4	5,000 00	
	"	1.	Austin Primary Schoolhouse, Furnishing,	4	4,000 00	
	"	1.	Grammar Schoolhouse, Gibson District, Furnishing,	4	10,000 00	
	"	1.	Grammar Schoolhouse, Mt. Vernon District, Grading, etc.,	4	4,000 00	
	"	1.	Primary Schoolhouse, Canterbury and Sharon Streets, Grading, etc.,	4	5,000 00	
	"	1.	Primary Schoolhouse, Canterbury and Sharon Streets, Furnishing,	4	4,000 00	
	"	1.	Primary Schoolhouse, Eustis Street, Furnishing,	4	4,000 00	
	"	1.	Primary Schoolhouse, Morton Street, Grading, etc.,	4	4,000 00	
	"	1.	Primary Schoolhouse, Morton Street, Furnishing,	4	3,000 00	
	"	1.	Primary Schoolhouse, Moulton Street, Furnishing,	4	4,000 00	
	"	1.	Primary Schoolhouse, North of Broadway, Furnishing,	4	4,000 00	
	"	1.	Primary Schoolhouse, Oak Square, Furnishing,	4	1,000 00	
	"	1.	Primary Schoolhouse, Oak Square, Grading, etc.,	4	3,500 00	
	Oct.	1.	New Schoolhouse, Ward 15,	4	70,000 00	
	"	1.	Primary Schoolhouse, Aberdeen District, Building,	4	30,000 00	
	"	1.	Primary Schoolhouse, North and West Ends,	4	45,000 00	
	"	1.	Brighton High Schoolhouse, Grading, etc.,	4	16,000 00	
	"	1.	Grammar Schoolhouse, Gibson District, Grading, etc.,	4	10,000 00	
	"	1.	Grammar Schoolhouse, Stoughton District, Grading, etc.,	4	8,000 00	
	"	1.	Primary Schoolhouse, Genesee Street, Grading, etc.,	4	27,000 00	
Total, Financial Year, 1915-16,						273,500 00
1917.	Jan.	1.	School Buildings, Improvements in,	4		300,000 00
1917.	July	1.	Bailey Street School, Additional Land,	3½	\$12,000 00	
	Oct.	1.	School Buildings, Improvements in,	3½	100,000 00	
1918.	Jan.	1.	Groton Street School, etc.,	3½	2,000 00	
Total, Financial Year, 1917-18,						114,000 00
1926.	July	1.	Schoolhouses (Acts 1895),	4		500,000 00
1927.	July	1.	Schoolhouses (Acts 1895),	4	\$150,000 00	
Carried forward,					\$150,000 00	\$1,583,500 00

<i>Brought forward,</i>					\$150,000 00	\$1,583,500 00
1928.	Jan.	1.	Schoolhouses (Acts 1897),	3½	500,000 00	
Total, Financial Year, 1927-28,						650,000 00
1928.	June	1.	Land and Buildings for Schools,	4	\$750,000 00	
	Oct.	1.	Schoolhouses (Acts 1897),	3½	650,000 00	
Total, Financial Year, 1928-29,						1,400,000 00
1929.	April	1.	Land and Buildings for Schools,	3½	\$750,000 00	
	July	1.	School Committee,	3½	25,000 00	
	Oct.	1.	Schoolhouses (Acts 1898),	3½	300,000 00	
1930.	Jan.	1.	School Committee,	3½	475,000 00	
Total, Financial Year, 1929-30,						1,550,000 00
1930.	July	1.	Schoolhouses (Acts 1898),	3	\$21,650 00	
	Oct.	1.	Schoolhouses (Acts 1898),	3	278,350 00	
Total, Financial Year, 1930-31,						300,000 00
1931.	July	1.	Schoolhouses (Acts 1898),	3½	\$250,000 00	
	"	1.	Land and Buildings for Schools,	3½	1,000,000 00	
	Oct.	1.	Completion of School Buildings (Acts 1901),	3	100,000 00	
1932.	Jan.	1.	Completion of School Buildings (Acts 1901),	3	200,000 00	
Total, Financial Year, 1931-32,						1,550,000 00
1932.	June	1.	Land and Buildings for Schools (Acts 1901),	3½	\$1,000,000 00	
	Dec.	31.	Land and Buildings for Schools,	3½	500,000 00	
Total, Financial Year, 1932-33,						1,500,000 00
1937.	Jan.	1.	Land and Buildings for Schools,	3½		50,000 00
1937.	April	1.	Land and Buildings for Schools,	4	\$351,400 00	
	July	1.	Land and Buildings for Schools,	4	535,600 00	
Total, Financial Year, 1937-38,						887,000 00
1944.	June	1.	Land and Buildings for Schools,	3½	\$1,500,000 00	
1945.	Jan.	1.	Land and Buildings for Schools,	3½	509,000 00	
Total, Financial Year, 1944-45,						2,009,000 00
1945.	April	1.	Land and Buildings for Schools,	3½	\$54,000 00	
	July	1.	Land and Buildings for Schools,	3½	1,500,000 00	
Total, Financial Year, 1945-46,						1,554,000 00
Total Debt,						<u>\$13,033,500 00</u>

SCHOOLHOUSES SINKING FUND, No. 2.

Resources of the "Schoolhouses Sinking Fund, No. 2," being Bonds and Cash. The dates show when the Bonds become due.

1914.	Oct.	1.	Schools,	4		\$25,000 00
1916.	Nov.	30.	Various Municipal Purposes, November 4, 1896,	4		223,500 00
1922.	Jan.	1.	Massachusetts Historical Society Building,	3		150,000 00
	"	1.	Malden Bridge,	3		50,000 00
	"	1.	Courthouse, Roxbury, Enlargement of,	3		26,000 00
	"	1.	Courthouse, Roxbury, Completion of,	3		20,000 00
	"	1.	Long Island Hospital, New Wing, etc.,	3		10,000 00
	"	1.	Municipal Building, Ward 16,	3		35,000 00
	"	1.	Mt. Hope Cemetery, Administration Building,	3		40,000 00
	"	1.	Gymnasium, First Street Playground,	3		9,000 00
1925.	Nov.	1.	Commonwealth of Massachusetts,	3½		98,000 00
1926.	June	1.	Franklin Union, Site,	3½		31,000 00
	July	1.	Schoolhouses,	4		12,000 00
1927.	July	1.	Schoolhouses,	4		150,000 00
1929.	July	1.	School Committee,	3½		25,000 00
	Oct.	1.	Schoolhouses,	3½		150,000 00
1930.	Jan.	1.	School Committee, Loans,	3½		25,000 00
	Oct.	1.	Schoolhouses,	3		75,000 00
1931.	April	1.	Laying Out and Construction of Highways,	3		10,000 00
	July	1.	Schoolhouses,	3½		29,000 00
	Oct.	1.	Completion of School Buildings,	3		100,000 00
<i>Carried forward,</i>						<u>\$1,293,500 00</u>

SINKING FUNDS DEPARTMENT.

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<i>Brought forward,</i>					\$1,293,500 00
1932.	June 1.	Land and Buildings for Schools,	3½		402,000 00
	Dec. 31.	Land and Buildings for Schools,	3½		130,000 00
1934.	Jan. 1.	Highways, Making of,	3½		25,000 00
1935.	July 1.	Schoolhouses,	4		240,000 00
1937.	Jan. 1.	Land and Buildings for Schools,	3½		50,000 00
	April 1.	Land and Buildings for Schools,	4		189,000 00
	July 1.	Land and Buildings for Schools,	4		221,000 00
	" 1.	Sewerage Loan,	4		29,000 00
1940.	July 1.	Commonwealth of Massachusetts,	3½		2,000 00
1941.	Jan. 1.	Commonwealth of Massachusetts,	3½		43,000 00
1942.	Jan. 1.	Commonwealth of Massachusetts,	3½		100,000 00
1944.	Jan. 1.	Commonwealth of Massachusetts,	3½		2,000 00
	June 1.	Land and Buildings for Schools,	3½		60,000 00
1945.	Jan. 1.	Land and Buildings for Schools,	3½		110,000 00
					<u>\$2,896,500 00</u>

SERIAL BONDS.

Due July 1, 1914-15, \$2,000 annually.	Fire Station, Lauriat Avenue District,	4	\$4,000 00	
Due " 1, 1916-20, \$1,000 annually.	Fire Station, Lauriat Avenue District,	4	5,000 00	
Due " 1, 1914-20, \$1,000 annually.	New Library Building, Ward 22, Additional,	4	7,000 00	
				<u>16,000 00</u>
Investments,				\$2,912,500 00
Cash,				426,153 31
Total Resources,				<u>\$3,338,653 31</u>

SEPARATE SYSTEMS OF DRAINAGE DEBT AND SINKING FUND, No. 2.

SEPARATE SYSTEMS OF DRAINAGE SINKING FUND DEBT, No. 2.

"Separate Systems of Drainage Debt" of the City of Boston, issued under chapter 485, Acts of 1907, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Separate Systems of Drainage Sinking Fund, No. 2." The dates show when the debt becomes due.

1938.	June 1.	Separate Systems of Drainage,	4	\$255,000 00
1939.	April 1.	Separate Systems of Drainage,	3½	664,000 00
Total Debt,				<u>\$919,000 00</u>

SEPARATE SYSTEMS OF DRAINAGE SINKING FUND, No. 2.

Resources of the "Separate Systems of Drainage Sinking Fund, No. 2," being Bonds and Cash. The dates show when the Bonds become due.

1914.	Oct. 1.	Schools,	4	\$25,000 00
1916.	July 1.	Laying Out and Construction of Highways,	4	10,000 00
1928.	Oct. 1.	Chapel, Mt. Hope Cemetery,	3½	23,000 00
1935.	Jan. 1.	Playground, Ward 22,	3½	30,000 00
1940.	July 1.	Commonwealth of Massachusetts,	3½	10,000 00
1941.	Jan. 1.	Commonwealth of Massachusetts,	3½	3,000 00
Investments,				\$101,000 00
Cash,				22,337 86
Total Resources,				<u>\$123,337 86</u>

SEWERAGE LOAN DEBT AND SINKING FUND, No. 2.

SEWERAGE LOAN SINKING FUND DEBT, No. 2.

"Sewerage Loan Debt," issued under chapter 426, Acts of 1897, chapter 257, Acts of 1898, and chapter 450, Acts of 1899, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Sewerage Loan Sinking Fund, No. 2." The dates show when the debt becomes due.

1938.	June 1.	Sewerage Loan,	4	\$300,000 00
1939.	April 1.	Sewerage Loan,	3½	300,000 00
Total Debt,				<u>\$600,000 00</u>

SEWERAGE LOAN SINKING FUND, No. 2.

Resources of the "Sewerage Loan Sinking Fund, No. 2," being Bonds and Cash. The dates show when the Bonds become due.

1917.	July	1.	Massachusetts Historical Society Building,	3½	\$12,000 00
		1.	Parental School, New Building,	3½	7,000 00
1919.	April	1.	Faneuil Hall Building Reconstruction,	3½	15,000 00
1935.	Mar.	1.	Commonwealth of Massachusetts,	3½	8,000 00
1938.	Jan.	1.	Commonwealth of Massachusetts,	3½	3,000 00
1940.	Jan.	1.	Commonwealth of Massachusetts,	3½	8,000 00
Investments,					\$53,000 00
Cash,					34,552 95
Total Resources,					<u>\$87,552 95</u>

TWENTY-YEAR DEBT AND SINKING FUND.

TWENTY-YEAR SINKING FUND DEBT.

"Twenty-Year Debt" of the City of Boston, to be paid as it becomes due from the resources of the "Twenty-Year Sinking Fund." The dates show when the debt becomes due.

1914.	July	1.	Improved Sewerage,	4	\$50,000 00
		1.	Commonwealth Avenue Extension,	4	100,000 00
	Oct.	1.	Commonwealth Avenue Extension,	4	100,000 00
	"	1.	Various Municipal Purposes, 1894,	4	403,800 00
	"	1.	Crushed Stone for Street Improvements,	4	50,000 00
Total, Financial Year, 1914-15,					\$703,800 00
1915.	April	1.	Improved Sewerage,	4	\$67,650 00
	"	1.	Parental School for Boys, Furnishing,	4	5,000 00
	"	1.	Various Municipal Purposes, 1894,	4	213,000 00
	"	1.	Various Municipal Purposes, April 22, 1895,	4	86,500 00
	Oct.	1.	New Buildings, City Hospital,	4	300,000 00
	"	1.	Various Municipal Purposes, July 12, 1894,	4	87,000 00
	"	1.	Various Municipal Purposes, January 4, 1895,	4	10,000 00
	"	1.	Various Municipal Purposes, April 22, 1895,	4	60,000 00
	"	1.	Various Municipal Purposes, July 9, 1895,	4	38,500 00
	"	1.	House of Industry, Additions and Alterations,	4	50,000 00
	"	1.	Parental School for Boys, New Buildings and Alterations,	4	50,000 00
1916.	Jan.	1.	Various Municipal Purposes, July 9, 1895,	4	1,008,700 00
	"	1.	Library Building, Copley Square, Furnishing,	4	44,000 00
Total, Financial Year, 1915-16,					2,020,350 00
1916.	July	1.	Various Municipal Purposes, July 9, 1895,	4	\$328,400 00
	"	1.	Sewer Outlets, South Boston,	4	35,000 00
	"	1.	Sidewalk Assessments, Repayment of,	4	100,000 00
	"	1.	Wire Department,	4	50,000 00
	"	1.	Public Bath House,	4	1,000 00
	Oct.	1.	Public Bath House,	4	64,000 00
	"	1.	Various Municipal Purposes, July 3, 1896,	4	103,500 00
	"	15.	Street Department, Sewer Division,	4	41,000 00
	Nov. 30.	1.	Various Municipal Purposes, November 4, 1896,	4	216,500 00
1917.	Jan.	1.	Commonwealth Avenue,	3½	50,000 00
	"	1.	Various Municipal Purposes, November 4, 1896,	4	36,500 00
Total, Financial Year, 1916-17,					1,025,900 00
1917.	April	1.	Various Municipal Purposes, November 4, 1896,	4	\$1,000 00
	July	1.	Various Municipal Purposes, November 4, 1896,		136,000 00
	"	1.	Wire Department,	4	50,000 00
	"	1.	Fireboat,	3½	16,000 00
	"	1.	Massachusetts Historical Society Building,	3½	25,000 00
	"	1.	Parental School, New Building, etc.,	3½	7,000 00
	"	1.	House of Industry, Additions and Alterations,	3½	20,000 00
Carried forward,					<u>\$255,000 00</u>
					<u>\$3,750,050 00</u>

SINKING FUNDS DEPARTMENT.

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<i>Brought forward,</i>					\$255,000 00	\$3,750,050 00
1917.	July	1.	Various Municipal Purposes, June 18, 1897,	3½	63,000 00	
	Oct.	1.	Various Municipal Purposes, June 18, 1897,	4	137,000 00	
1918.	Jan.	1.	Nurses' Home, Site, etc.,	3½	101,000 00	
	"	1.	Various Municipal Purposes, October 29, 1897,	3½	25,000 00	
Total, Financial Year, 1917-18,						581,000 00
1918.	April	1.	Wire Department,	3½	\$50,000 00	
	"	1.	Various Municipal Purposes, February 21, 1898,	3½	213,000 00	
	July	1.	Faneuil Hall Building, Reconstruction,	3½	80,000 00	
	"	1.	New Buildings, City Hospital,	3½	23,000 00	
	"	1.	Street Improvements, June 30, 1898,	3½	181,480 00	
	Oct.	1.	Bridge, Lauriat avenue,	3½	21,000 00	
	"	1.	Evergreen Cemetery, Wall,	3½	1,500 00	
	"	1.	Various Municipal Purposes, September 30, 1898,	3½	16,500 00	
	"	1.	Washington Street, between Grove Hall and Columbia Road,	3½	4,500 00	
Total, Financial Year, 1918-19,						590,980 00
1919.	April	1.	Various Municipal Purposes, February 27, 1899,	3½	\$175,600 00	
	"	1.	Faneuil Hall Building, Reconstruction,	3½	15,000 00	
	July	1.	Various Municipal Purposes, February 27, 1899,	3½	200,000 00	
	"	1.	Chelsea Bridge, Widening Draw, etc.,	3½	30,000 00	
	"	1.	Malden Bridge,	3½	100,000 00	
	"	1.	New Buildings, City Hospital,	3½	14,500 00	
	Oct.	1.	Almshouse, Long Island, New Power House and Equipment,	3½	10,000 00	
	"	1.	Various Municipal Purposes, June 27, 1899,	3	8,000 00	
	Dec.	1.	Faneuil Hall Building, Reconstruction,	3½	1,500 00	
	"	1.	Various Municipal Purposes, October 30, 1899,	3½	14,939 02	
Total, Financial Year, 1919-20,						569,539 02
1921.	Jan.	1.	Engine House, Warren Avenue, Completion of,	3	\$27,000 00	
	"	1.	Various Municipal Purposes, January 5, 1901,	3	352,000 00	
Total, Financial Year, 1920-21,						379,000 00
1921.	April	1.	Wardroom and Gymnasium, Ward 8,	3	\$10,000 00	
	"	1.	L Street Bath, New Buildings,	3	10,000 00	
	"	1.	Municipal Building, Upham's Corner,	3	22,000 00	
	"	1.	Hospital Relief Station,	3	40,000 00	
	"	1.	Various Municipal Purposes, January 5, 1901,	3	91,000 00	
	July	1.	Green Street, Main to High, Widening,	3½	1,300 00	
	"	1.	Bennington Street, Sewer Damages,	3½	55,300 00	
	"	1.	Beacon Street, Building Line,	3½	45,000 00	
	"	1.	Completion of Morgue,	3½	20,000 00	
	"	1.	Surgical Out-Patient Department,	3½	50,000 00	
	"	1.	New Ward, Isolated Patients,	3½	50,000 00	
	"	1.	Courthouse, Roxbury District, etc.,	3½	50,000 00	
	"	1.	Women's Prison, Jail,	3½	100,000 00	
	"	1.	Malden Bridge,	3½	50,000 00	
	"	1.	Hospital Buildings, Improvements,	3½	48,000 00	
	"	1.	Wardroom and Gymnasium, Ward 8,	3½	19,000 00	
	Oct.	1.	Land and Buildings, Parental School,	3	40,000 00	
	"	1.	Municipal Building, Ward 16,	3	10,000 00	
	"	1.	Sheriff, Jail, Additional,	3	50,000 00	
	"	1.	New House of Correction,	3	15,000 00	
	"	1.	Garbage Plant, Spectacle Island,	3	40,000 00	
	"	1.	Completion of Morgue,	3	10,000 00	
	"	1.	Ground for Target Practice,	3	25,000 00	
1922.	Jan.	1.	Massachusetts Historical Society Building,	3	150,000 00	
	"	1.	Malden Bridge,	3	50,000 00	
	"	1.	Courthouse, Roxbury, Enlargement of,	3	26,000 00	
	"	1.	Courthouse, Roxbury, Completion of,	3	20,000 00	
	"	1.	Long Island Hospital, New Wing, etc.,	3	10,000 00	
	"	1.	Municipal Building, Ward 16,	3	35,000 00	
	"	1.	Mt. Hope Cemetery, Administration Building,	3	40,000 00	
Total, Financial Year, 1921-22,						1,182,600 00
<i>Carried forward,</i>						\$7,053,169 02

<i>Brought forward,</i>				\$7,053,169 02
1922.	June	1.	Surgical Out-Patient Department Building,	3½ \$50,000 00
	"	1.	New Ward for Isolated Patients,	3½ 70,000 00
	"	1.	Land and Buildings, Sanitary and Street Cleaning Division, Dorchester,	3½ 34,000 00
	"	1.	Rutherford Avenue, Widening,	3½ 100,000 00
	"	1.	New House of Correction,	3½ 85,000 00
	"	1.	Land and Buildings, Parental School,	3½ 75,000 00
	"	1.	House of Correction (chapter 347, Acts 1899),	3½ 150,000 00
	"	1.	Sheriff, Jail, Additional,	3½ 100,000 00
	"	1.	Garbage Plant, Spectacle Island,	3½ 100,000 00
	Oct.	1.	Municipal Buildings, Upham's Corner,	3½ 65,000 00
	"	1.	Land and Buildings, Parental School,	3½ 35,000 00
	"	1.	Armory Building, Ward 3,	3½ 29,000 00
	"	1.	Insane Hospital, Land and Buildings,	3½ 13,700 00
1923.	Jan.	1.	Bath House, North End,	3½ 40,000 00
	"	1.	Copley Square, Buildings on and near,	3½ 48,000 00
	"	1.	Beacon Street, Building Line,	3½ 33,000 00
	"	1.	Suffolk County Courthouse,	3½ 10,000 00
	"	1.	Mt. Hope Cemetery, Developing Land,	3½ 12,000 00
	"	1.	Parental School, Conduit for Electric Wires,	3½ 1,500 00
	"	1.	Coal Pocket, etc., Long Island,	3½ 1,000 00
	"	1.	Nurses' Home, Long Island,	3½ 3,000 00
	"	1.	Hospital Wing, Long Island,	3½ 8,000 00
	"	1.	Wardroom and Gymnasium, Ward 8,	3½ 1,000 00
	"	1.	Courthouse, Roxbury District,	3½ 7,000 00
	"	1.	Wardroom, Ward 15, Reconstruction,	3½ 1,500 00
	"	1.	Wardroom, Ward 17, Reconstruction,	3½ 2,500 00
	"	1.	Jail, New Brick Wall,	3½ 16,000 00
	"	1.	Street Improvements,	3½ 500,000 00
	"	1.	Cottage Street Bridge, Improvement of,	3½ 6,500 00
	"	1.	Bridge Department, New Trucks,	3½ 2,500 00
	"	1.	Epidemic Hospital, Boilers, etc.,	3½ 4,000 00
	"	1.	Bridge Department, Construction of Piers,	3½ 10,000 00
Total, Financial Year, 1922-23,				1,614,200 00
1923.	April	1.	Bath House, K Street (women),	3½ \$2,000 00
	"	1.	Bath House, Dewey Beach, Charlestown,	3½ 4,000 00
	"	1.	Mt. Hope Cemetery, Grading, etc.,	3½ 2,500 00
	"	1.	Evergreen Cemetery, etc., Improvements in,	3½ 10,000 00
	"	1.	Parental School, Furnishing Three Cottages,	3½ 10,000 00
	"	1.	Parental School, Electrical Plant,	3½ 5,000 00
	"	1.	City Hospital, Furnishing Three New Buildings,	3½ 5,500 00
	"	1.	Faneuil Hall Market, Sanitary Station, etc.,	3½ 5,000 00
	"	1.	Curtis Hall, Reconstruction,	3½ 6,000 00
	June	1.	Mt. Hope Cemetery, Developing Land,	3½ 5,000 00
	"	1.	Parental School, Electric Plant,	3½ 10,000 00
	"	1.	Faneuil Hall Market, Sanitary Station, etc.,	3½ 5,000 00
	"	1.	Reconstruction of Bridges over Railroad Tracks at Norfolk, Harvard, Medway and West Selden Streets,	3½ 9,000 00
	"	1.	Footbridge over N. Y., N. H. & H. R. R. at Sarsfield Street,	3½ 5,000 00
	"	1.	Footbridge over N. Y., N. H. & H. R. R. at Northampton Street,	3½ 5,000 00
	"	1.	Faneuil Hall Market, New Roof,	3½ 4,000 00
	"	1.	Land and Buildings, Insane Hospital,	3½ 113,300 00
	"	1.	New House of Correction,	3½ 150,000 00
	"	1.	Bath House, Cabot Street,	3½ 100,000 00
	"	1.	Gallop's Island, New Wharf, etc.,	3½ 10,000 00
	"	1.	City Hospital, Furnishing Three New Buildings,	3½ 30,000 00
	"	1.	Mortuary and Receiving Room, Long Island,	3½ 10,000 00
	"	1.	Tie-up for Cattle, Long Island,	3½ 4,500 00
	"	1.	Ice House, Long Island,	3½ 2,000 00
	"	1.	Extension of Electric Plant, Long Island,	3½ 3,000 00
	"	1.	Coal Pocket and Strengthening Wharf, Long Island,	3½ 10,000 00
	"	1.	Wharf, Deer Island, Reconstruction,	3½ 7,000 00
	"	1.	New Building in place of Old Town Hall, Dorchester,	3½ 35,000 00
	"	1.	Lancers' Armory,	3½ 10,000 00
	"	1.	Municipal Building, Upham's Corner,	3½ 30,000 00
	"	1.	Thomas Park, Grading, etc.,	3½ 5,000 00
	"	1.	Yard for Street Cleaning Division, West End,	3½ 5,000 00
	"	1.	Bath House, North End,	3½ 50,000 00
	"	1.	Office for Street Cleaning Division, Charlestown,	3½ 3,000 00
<i>Carried forward,</i>				\$670,800 00 \$8,667,369 02

SINKING FUNDS DEPARTMENT.

21

			<i>Brought forward,</i>		\$670,800 00	\$8,667,369 02
1923.	June	1.	Freeport Street, Retaining Wall,	3½	5,000 00	
	"	1.	Mt. Hope Cemetery, Additional Land and Improvements,	3½	30,000 00	
	"	1.	Tower and Bell on Building corner of Bunker Hill and Lexington Streets,	3½	1,000 00	
	"	1.	New Ward for Isolated Patients, City Hospital,	3½	7,000 00	
	"	1.	Surgical Out-Patient Department Building, City Hospital,	3½	4,200 00	
	Oct.	1.	Footbridge over N. Y., N. H. & H. R. R. at Gainsborough Street,	3½	5,000 00	
1924.	Jan.	1.	Street Improvements,	3½	150,000 00	
	"	1.	Stony Brook, Damages,	3½	186,000 00	
	"	1.	Atlantic Avenue, Reconstruction,	3½	14,000 00	
	"	1.	Van Winkle Street, Ward 24, Tunnel under Railroad,	3½	5,800 00	
	"	1.	Reconstruction of Bridges over Railroad Tracks at Norfolk, Harvard, Medway and West Selden Streets,	3½	31,000 00	
Total, Financial Year, 1923-24,						1,109,800 00
1924.	June	1.	Atlantic Avenue, Reconstruction,	3½	\$66,000 00	
	"	1.	Institutions Department, New Boat,	3½	75,000 00	
	"	1.	Street Improvements,	3½	300,000 00	
	"	1.	Shawmut Avenue Bridge,	3½	28,000 00	
	"	1.	Furnishing New Building, Austin Farm,	3½	14,000 00	
Total, Financial Year, 1924-25,						483,000 00
1925.	Dec.	1.	Abolition of Grade Crossing, Dorchester Avenue,	3½	\$757,000 00	
	"	1.	Bennington Street, Sewer Damages,	3½	18,500 00	
	"	1.	Copley Square, Buildings on or near,	3½	1,500 00	
	"	1.	Eustis Street, Burial Ground, Fence,	3½	1,000 00	
	"	1.	Bath House, Cabot Street,	3½	5,000 00	
	"	1.	Chelsea Bridge, South Draw, Reconstruction of,	3½	500 00	
	"	1.	Cottage Street Bridge, Reconstruction of,	3½	7,000 00	
	"	1.	Dover Street Bridge, Widening of Draw,	3½	9,000 00	
	"	1.	Coal Pocket, Ferry Division,	3½	25,000 00	
	"	1.	Equipping Ferryboats,	3½	12,000 00	
	"	1.	Street Improvements,	3½	220,000 00	
	"	1.	Freeport Street, Retaining Wall,	3½	7,500 00	
1926.	Jan.	1.	Chelsea Bridge, Widening of Draw,	3½	14,500 00	
Total, Financial Year, 1925-26,						1,078,500 00
1926.	June	1.	Franklin Union, Site,	3½	\$100,000 00	
	"	1.	Emergency Hospital, East Boston,	3½	6,000 00	
	July	1.	Hospital for Consumptives,	4	150,000 00	
	Oct.	1.	Emergency Hospital, East Boston,	3½	24,000 00	
	Dec.	1.	Temple Street, Ward 23, Tunnel, etc.,	3½	4,350 00	
1927.	Jan.	1.	Temple Street, Ward 23, Tunnel, etc.,	3½	27,650 00	
	"	1.	Copley Square, Buildings on or near,	3½	347,000 00	
	"	1.	Bowdoin Street, Grade Damages,	3½	61,000 00	
	"	1.	Dorchester Street,	3½	6,100 00	
	"	1.	Abolition of Grade Crossings, Dorchester Avenue,	3½	80,000 00	
Total, Financial Year, 1926-27,						806,100 00
1927.	April	1.	Emergency Hospital, East Boston,	4	\$28,000 00	
	"	1.	Bath House, McKenzie Beach,	4	5,000 00	
	July	1.	Brandon Street and Belgrade Avenue,	4	7,200 00	
	"	1.	Old Provincial State House,	4	7,500 00	
	"	1.	Meridian Street Bridge,	4	10,000 00	
	"	1.	Bath House, Tenean Beach,	4	5,000 00	
	"	1.	Bath House, Dewey Beach,	4	2,000 00	
	"	1.	Engine 7 House, Addition,	4	2,000 00	
	"	1.	Ward Building for Measles,	4	75,000 00	
	"	1.	Ladder 1 House, Rebuilding,	4	8,000 00	
	"	1.	Engine 6 House, Addition,	4	6,000 00	
	"	1.	New Fireboat,	4	75,000 00	
	"	1.	Engine 29 and Ladder 11 House, Alterations,	4	4,000 00	
	"	1.	Washington Avenue Bridge,	4	60,000 00	
	"	1.	Consumptives' Hospital, Building and Equipment,	4	140,000 00	
	"	1.	Landing for Fireboat and Quarters for Men,	4	10,000 00	
<i>Carried forward,</i>					\$444,700 00	\$12,144,769 02

<i>Brought forward,</i>				\$444,700 00	\$12,144,769 02
1927.	July	1.	House and Apparatus, Parker Hill,	4	15,000 00
	"	1.	House, Land and Apparatus, Forest Hills,	4	30,000 00
	"	1.	House, Land and Apparatus, Orient Heights,	4	15,000 00
Total, Financial Year, 1927-28,					504,700 00
1928.	April	1.	Consumptives' Hospital Department, Buildings and Equipment,	4	\$17,000 00
	June	1.	Wharf, Long Island,	4	16,500 00
	"	1.	Bath House, North End, Additional,	4	20,000 00
	"	1.	School Building, Parental School, West Roxbury,	4	50,000 00
	"	1.	Hospital for Consumptives', Additional,	4	25,000 00
	"	1.	Chelsea Bridge,	4	75,000 00
	"	1.	Huntington Avenue Bridge,	4	55,000 00
	"	1.	Massachusetts Avenue Bridge,	4	40,000 00
	"	1.	Congress Street Bridge,	4	35,000 00
	"	1.	New Fireboat, Additional,	4	20,000 00
	"	1.	Emergency Hospital, East Boston, Equipment,	4	13,000 00
	"	1.	Washington Street, West Roxbury,	4	25,000 00
	"	1.	City Buildings, Adams and Arcadia Streets, Addition,	4	6,500 00
Total, Financial Year, 1928-29,					398,000 00
Total Debt,					<u>\$13,047,469 02</u>

TWENTY YEAR SINKING FUND.

Resources of the "Twenty-Year Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1914.	April	1.	Muddy River Improvement,	4	\$75,000 00	
	July	1.	Commonwealth Avenue Extension,	4	100,000 00	
	Oct.	1.	Various Municipal Purposes, 1894,	4	404,800 00	
	"	1.	Schools,	4	200,000 00	
	"	1.	Commonwealth Avenue Extension,	4	100,000 00	\$879,800 00
1915.	April	1.	Improved Sewerage,	4	\$67,650 00	
	"	1.	Parental School for Boys, Furnishing,	4	5,000 00	
	"	1.	Various Municipal Purposes, 1894,	4	100,000 00	
	Oct.	1.	Various Municipal Purposes, January 4, 1895,	4	155,000 00	
	"	1.	New Buildings, City Hospital,	4	300,000 00	
	"	1.	House of Industry, Additions, etc.,	4	50,000 00	
	"	1.	Parental School for Boys, etc.,	4	50,000 00	
1916.	Jan.	1.	Various Municipal Purposes, July 9, 1895,	4	158,000 00	885,650 00
1916.	July	1.	Various Municipal Purposes, July 9, 1895,	4	\$133,400 00	
	"	1.	Sewer Outlets, South Boston,	4	35,000 00	
	Oct.	1.	Various Municipal Purposes, July 3, 1896,	4	103,500 00	
	"	1.	New Ferry Landing,	4	25,000 00	
	"	15.	Sewer Division, Street Department,	4	41,000 00	
1917.	Jan.	1.	Commonwealth Avenue,	3½	50,000 00	
	"	1.	Various Municipal Purposes, November 4, 1896,	4	27,000 00	414,900 00
1917.	July	1.	Public Parks,	3½	\$1,000 00	
	"	1.	Wire Department,	4	50,000 00	
	"	1.	House of Industry, Alterations and Additions,	3½	6,000 00	
	Oct.	1.	Various Municipal Purposes, November 4, 1896,	4	112,000 00	
	"	1.	Stony Brook Improvement,	4	1,000 00	
1918.	Jan.	1.	Various Municipal Purposes, October 29, 1897,	3½	27,000 00	
	"	1.	Nurses' Home, Site, etc.,	3½	47,000 00	244,000 00
1918.	April	1.	Various Municipal Purposes, February 21, 1898,	3½	\$213,000 00	
	July	1.	Street Improvements,	3½	140,000 00	
	Oct.	1.	Suffolk County Courthouse,	4	150,000 00	503,000 00
1919.	July	1.	Various Municipal Purposes, February 27, 1899,	3½		20,000 00
1922.	June	1.	Garbage Plant, Spectacle Island,	3½	\$10,000 00	
	"	1.	Various Municipal Purposes,	3½	48,000 00	
<i>Carried forward,</i>					\$58,000 00	\$2,947,350 00

SINKING FUNDS DEPARTMENT.

23

<i>Brought forward,</i>					\$58,000 00	\$2,947,350 00
1922.	July	1.	Suffolk County Courthouse,	4	213,000 00	
	Oct.	1.	Armory Building, Ward 3,	3½	29,000 00	
	"	1.	Various Municipal Purposes, July 3, 1901,	3½	11,000 00	
	"	1.	Municipal Building, Upham's Corner,	3½	65,000 00	
1923.	Jan.	1.	Various Municipal Purposes, October 30, 1902,	3½	586,500 00	
						962,500 00
1923.	June	1.	Various Municipal Purposes,	3½	\$90,000 00	
		1.	Bath House, North End,	3½	38,000 00	
1924.	Jan.	1.	Various Municipal Purposes, January 2, 1904,	3½	139,000 00	
						267,000 00
1924.	June	1.	Various Municipal Purposes,	3½		2,000 00
1925.	Dec.	1.	Abolition Grade Crossings, Dorchester Avenue,	3½	\$51,000 00	
	"	1.	Various Municipal Purposes,	3½	84,000 00	
1926.	Jan.	1.	Various Municipal Purposes, October 30, 1902,	3½	10,000 00	
	"	1.	Various Municipal Purposes, July 29, 1905,	3½	2,000 00	
						147,000 00
1926.	July	1.	Various Municipal Purposes,	4	\$108,000 00	
1927.	Jan.	1.	Temple Street, Ward 23, Tunnel, etc.,	3½	16,250 00	
	"	1.	Various Municipal Purposes,	3½	490,000 00	
	"	1.	Dorchester Street,	3½	4,100 00	
						618,350 00
1927.	July	1.	Brandon Street and Belgrade Avenue,	4	\$7,200 00	
	"	1.	Old Provincial State House,	4	7,500 00	
	"	1.	Meridian Street Bridge,	4	10,000 00	
	"	1.	Various Municipal Purposes,	4	138,000 00	
	"	1.	Ward Building for Measles,	4	2,000 00	
1928.	Jan.	1.	Sewerage Loan,	3½	100,000 00	
						264,700 00
1928.	June	1.	Wharf, Long Island,	4	\$2,000 00	
	Oct.	1.	Schoolhouses,	3½	250,000 00	
						252,000 00
1930.	Jan.	1.	Chestnut Hill Park,	3½	58,000 00	
1931.	July	1.	Laying Out and Construction of Highways,	3½		150,000 00
1932.	Dec.	31.	Land and Buildings for Schools,	3½	\$240,000 00	
	"	31.	Highways, Making of,	3½	18,000 00	
						258,000 00
1935.	Jan.	1.	Separate Systems of Drainage,	3½		600,000 00
	Oct.	1.	Suffolk County Courthouse, \$3,740 payable October 1, 1935, annually, to and including October 1, 1935,	3		82,280 00
1937.	April	1.	Land and Buildings for Schools,	4	\$148,000 00	
	July	1.	Separate Systems of Drainage,	4	198,000 00	
	"	1.	Land and Buildings for Schools,	4	65,600 00	
	"	1.	Rapid Transit, Charlestown Bridge,	3½	61,000 00	
	"	1.	Rapid Transit,	3½	136,000 00	
1938.	Jan.	1.	Rapid Transit, Charlestown Bridge,	3½	135,000 00	
	"	1.	Rapid Transit,	3½	50,000 00	
						793,600 00
1947.	July	1.	Boston Tunnel and Subway,	4		225,000 00
						\$7,627,780 00

SERIAL BONDS.

Due July 1, 1914-30, \$1,000 annually.	V. M. P., Bathing Establishment, Ward 15, Additional,	4	\$17,000 00
Due " 1, 1914-15, \$1,000 annually.	V. M. P., Bathing House and Gymnasium, Ninth Street, Ward 15,	4	2,000 00
Due " 1, 1914-20, \$2,000 annually.	V. M. P., Bath House, Charlestown,	4	14,000 00
Due " 1, 1921-30, \$1,000 annually.	V. M. P., Bath House, Charlestown,	4	10,000 00
Due Jan. 1, 1915-16, \$3,000 annually.	V. M. P., New Quarters for Fireboat Crew, Boston Side,	3½	6,000 00
Due " 1, 1915-25, \$2,000 annually.	V. M. P., Old Colony Avenue,	3½	22,000 00
Due " 1, 1915-21, \$8,000 annually.	V. M. P., Chelsea Bridge South (Temporary Bridge),	3½	56,000 00
Due " 1, 1915-16, \$9,000 annually.	V. M. P., Meridian Street Bridge,	4	18,000 00
Due " 1, 1917-26, \$8,000 annually.	V. M. P., Meridian Street Bridge,	4	80,000 00

Carried forward,

\$225,000 00

\$7,627,780 00

<i>Brought forward,</i>				\$225,000 00	\$7,627,780 00
Due July 1, 1915-18, \$4,000 annually.	Hospital Department, Estate Massachusetts Avenue and Northampton Street, 4			16,000 00	
Due " 1, 1919-31, \$3,000 annually.	Hospital Department, Estate Massachusetts Avenue and Northampton Street, 4			39,000 00	
Due " 1, 1915-28, \$5,000 annually.	Fire Department, Repair Shop, 3½			70,000 00	
Due Oct. 1, 1925-32, \$3,000 annually.	East Boston Court- house and Police Station, 4			24,000 00	
Due " 1, 1914-20, \$5,000 annually.	Long Island Improve- ments, 4			35,000 00	
					409,000 00
Investments,					\$8,036,780 00
Cash,					231,376 47
Total Resources,					<u>\$8,268,156 47</u>

THIRTY-YEAR DEBT AND SINKING FUND, No. 1.

THIRTY-YEAR SINKING FUND DEBT, No. 1.

"Thirty-Year Debt" of the City of Boston, to be paid as it becomes due from the resources of the "Thirty-Year Sinking Fund." The dates show when the debt becomes due.

1928.	Oct.	1.	Chapel, Mt. Hope Cemetery,	3½	\$25,000 00	
Total, Financial Year, 1928-29,						\$25,000 00
1931.	Oct.	1.	Carleton Street,	3	\$18,000 00	
1932.	Jan.	1.	Carleton Street,	3	42,000 00	
Total, Financial Year, 1931-32,						60,000 00
1932.	June	1.	Broadway Bridge, Rebuilding,	3½	\$200,000 00	
	"	1.	Ferry Improvements,	3½	100,000 00	
Total, Financial Year, 1932-33,						300,000 00
1934.	Jan.	1.	Broadway Bridge, Rebuilding,	3½	\$60,000 00	
Total, Financial Year, 1933-34,						60,000 00
1935.	Jan.	1.	Broadway Bridge, Rebuilding,	3½	\$1,500 00	
Total, Financial Year, 1934-35,						1,500 00
1936.	Jan.	1.	Broadway Bridge, Rebuilding,	3½	\$1,500 00	
Total, Financial Year, 1935-36,						1,500 00
1939.	April	1.	Hyde Park Avenue, from Ashland Street to Hyde Park Line,	3½	\$69,000 00	
Total, Financial Year, 1939-40,						69,000 00
Total Debt,						<u>\$517,000 00</u>

THIRTY-YEAR SINKING FUND, No. 1.

Resources of the "Thirty-Year Sinking Fund, No. 1," being Bonds and Cash. The dates show when the Bonds becomes due.

1917.	July	1.	Fireboat,	3½	\$16,000 00	
1921.	April	1.	Hospital Building, Relief Station,	3	40,000 00	
	July	1.	Wardroom and Gymnasium, Ward 8,	3½	12,000 00	
1931.	July	1.	Laying Out and Construction of Highways,	3½	10,000 00	
1932.	June	1.	Broadway Bridge, Rebuilding,	3½	25,000 00	
	Dec.	31.	Highways, Making of,	3½	3,100 00	
1934.	Jan.	1.	Hyde Park Avenue,	3½	25,000 00	
1936.	Jan.	1.	Broadway Bridge, Rebuilding,	3½	1,500 00	
1937.	July	1.	Land and Buildings for Schools,	4	9,000 00	
1946.	June	1.	Boston Tunnel and Subway,	3½	18,000 00	
1947.	April	1.	Boston Tunnel and Subway,	4	11,000 00	
Investments,						\$170,600 00
Cash,						16,836 07
Total Resources,						<u>\$187,436 07</u>

SINKING FUND DEBT OF THE CITY OF BOSTON,

Issued OUTSIDE THE DEBT LIMIT fixed by Section 3 of
Chapter 27 of the Revised Laws.

ATLANTIC AVENUE EXTENSION DEBT AND SINKING FUND.

ATLANTIC AVENUE EXTENSION DEBT.

"Atlantic Avenue Extension Debt" of the City of Boston, issued under chapter 466, Acts 1899, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Atlantic Avenue Extension Sinking Fund." The dates show when the debt becomes due.

1932.	June	1.	Atlantic Avenue Extension.	3½	\$50,000 00
1934.	June	1.	Atlantic Avenue Extension,	3½	100,000 00
1936.	Jan.	1.	Atlantic Avenue Extension,	3½	20,000 00
1938.	Oct.	1.	Atlantic Avenue Extension,	4	8,900 00
Total Debt,					<u>\$178,900 00</u>

ATLANTIC AVENUE EXTENSION SINKING FUND.

Resources of the "Atlantic Avenue Extension Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1917.	Jan.	1.	School Buildings, Improvements in,	4	\$50,000 00
1930.	July	1.	Playgrounds,	3	100,000 00
1931.	July	1.	Schoolhouses,	3½	12,000 00
Investments,					\$162,000 00
Cash,					16,900 00
Total Resources,					<u>\$178,900 00</u>

BLUE HILL AND OTHER AVENUES DEBT AND SINKING FUND.

BLUE HILL AND OTHER AVENUES SINKING FUND DEBT.

"Blue Hill and Other Avenues Debt" of the City of Boston, issued under chapter 334, Acts of 1895, and chapter 236, Acts of 1898, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Blue Hill and Other Avenues Sinking Fund." The dates show when the debt becomes due.

1935.	July	1.	Blue Hill and Other Avenues,	4	\$1,000,000 00
1936.	July	1.	Blue Hill and Other Avenues,	4	1,000,000 00
1937.	Jan.	1.	Blue Hill and Other Avenues,	3½	60,000 00
1938.	July	1.	Blue Hill and Other Avenues,	3½	200,000 00
Total Debt,					<u>\$2,260,000 00</u>

BLUE HILL AND OTHER AVENUES SINKING FUND.

Resources of the "Blue Hill and Other Avenues Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1915.	Oct.	1.	City Point Park,	3½	\$13,000 00
"	"	1.	Charles River Embankment,	3½	16,000 00
"	"	1.	Various Municipal Purposes, July 12, 1894,	4	87,000 00
"	"	1.	Various Municipal Purposes, July 9, 1895,	4	8,500 00
1917.	July	1.	House of Industry, Alterations and Additions,	3½	14,000 00
Carried forward,					<u>\$138,500 00</u>

			<i>Brought forward,</i>		\$138,500 00
1917.	Oct.	1.	Stony Brook Improvement Scrip,	4	19,000 00
1919.	Oct.	1.	Suffolk County Courthouse,	3½	65,000 00
1921.	Jan.	1.	Engine House, Warren Avenue, Completion of,	3	27,000 00
	April	1.	Municipal Building, Upham's Corner,	3	22,000 00
	Oct.	1.	New House of Correction,	3	15,000 00
1924.	Jan.	1.	Various Municipal Purposes,	3½	11,000 00
1925.	Jan.	2.	Public Parks,	4	60,000 00
1927.	July	1.	Various Municipal Purposes,	4	5,000 00
1928.	Jan.	1.	Laying Out and Construction of Highways,	3½	25,000 00
	"	1.	Schoolhouses,	3½	18,000 00
	Oct.	1.	Public Parks,	3½	240,000 00
1931.	April	1.	Laying Out and Construction of Highways,	3	15,000 00
1932.	Dec.	31.	Land and Buildings for Schools,	3½	45,000 00
	"	31.	Highways, Making of,	3½	9,600 00
1934.	Jan.	1.	Charles River Basin,	3½	50,000 00
1936.	Oct.	1.	Charlestown Bridge,	4	100,000 00
1937.	July	1.	Sewerage Loan,	4	1,000 00
1941.	Oct.	1.	Rapid Transit, East Boston Tunnel,	3	100,000 00
1945.	April	1.	Boston Tunnel and Subway,	3½	128,000 00
1947.	April	1.	Boston Tunnel and Subway,	4	28,000 00
			Investments,		\$1,122,100 00
			Cash,		57,867 03
			Total Resources,		<u>\$1,179,967 03</u>

CAMBRIDGE BRIDGE DEBT AND SINKING FUND.

CAMBRIDGE BRIDGE SINKING FUND DEBT.

"Cambridge Bridge Debt" of the City of Boston, issued under chapter 467, Acts of 1898, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Cambridge Bridge Sinking Fund." The dates show when the debt become due.

1938.	Oct.	1.	Cambridge Bridge,	3½	\$50,000 00	
			Total, Financial Year, 1938-39,			\$50,000 00
1939.	July	1.	Cambridge Bridge,	3½	\$100,000 00	
1940.	Jan.	1.	Cambridge Bridge,	3½	200,000 00	
			Total, Financial Year, 1939-40,			300,000 00
1942.	June	1.	Cambridge Bridge,	3½	\$200,000 00	
			Total, Financial Year, 1942-43,			200,000 00
1943.	June	1.	Cambridge Bridge,	3½	\$200,000 00	
			Total, Financial Year, 1943-44,			200,000 00
1944.	June	1.	Cambridge Bridge,	3½	\$250,000 00	
1945.	Jan.	1.	Cambridge Bridge,	3½	50,000 00	
			Total, Financial Year, 1944-45,			300,000 00
1945.	July	1.	Cambridge Bridge,	3½	\$100,000 00	
			Total, Financial Year, 1945-46,			100,000 00
1946.	July	1.	Cambridge Bridge,	4	\$150,000 00	
			Total, Financial Year, 1946-47,			150,000 00
1947.	Dec.	1.	Cambridge Bridge,	4	\$49,000 00	
			Total, Financial Year, 1947-48,			49,000 00
1949.	Jan.	1.	Cambridge Bridge,	3½	\$3,900 00	
			Total, Financial Year, 1948-49,			3,900 00
			Total Debt,			<u>\$1,352,900 00</u>

CAMBRIDGE BRIDGE SINKING FUND.

Resources of the "Cambridge Bridge Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1919.	Jan.	1.	Public Park Construction,	4	\$14,000 00
1921.	April	1.	Wardroom and Gymnasium, Ward 8,	3	10,000 00
	"	1.	L Street Bath, New Building,	3	10,000 00
	June	1.	Public Park Loan,	4	19,000 00
	July	1.	Hospital Buildings, Improvements,	3½	30,000 00
1928.	Oct.	1.	Public Parks,	3½	22,000 00
1932.	Dec.	31.	Land and Buildings for Schools,	3½	25,000 00
	"	31.	Highways, Making of,	3½	7,900 00
1934.	Jan.	1.	Highways, Making of,	3½	14,000 00
1938.	Jan.	1.	Commonwealth of Massachusetts,	3½	8,000 00
1942.	Jan.	1.	Commonwealth of Massachusetts,	3½	12,000 00
1943.	June	1.	Cambridge Bridge,	3½	25,000 00
1945.	Jan.	1.	Cambridge Bridge,	3½	15,000 00
1947.	Jan.	1.	Boston Tunnel and Subway,	3½	3,150 00
	April	1.	Boston Tunnel and Subway,	4	12,000 00
	Dec.	1.	Cambridge Bridge,	4	16,000 00
Investments,					\$243,050 00
Cash,					25,838 04
Total Resources,					<u>\$268,888 04</u>

CHARLES RIVER BASIN DEBT AND SINKING FUND.

CHARLES RIVER BASIN DEBT.

"Charles River Basin Debt" of the City of Boston, issued under chapter 465, Acts of 1903, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of "Charles River Basin Sinking Fund." The dates show when the debt becomes due.

1934.	Jan.	1.	Charles River Basin,	3½	\$300,000 00
1944.	June	1.	Charles River Basin,	3½	500,000 00
Total Debt,					<u>\$800,000 00</u>

CHARLES RIVER BASIN SINKING FUND.

Resources of the "Charles River Basin Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1916.	April	1.	Bussey Park and Arnold Arboretum,	3½	\$20,000 00
1923.	Jan.	1.	Public Park Loan,	4	20,000 00
1923.	Oct.	1.	Public Park Loan,	4	14,000 00
1925.	Jan.	1.	Library Building, Copley Square,	4	5,000 00
1935.	Jan.	1.	Northern Avenue and Sleeper Street,	3½	4,000 00
1938.	Jan.	1.	Commonwealth of Massachusetts,	3½	25,000 00
1946.	June	1.	Boston Tunnel and Subway,	3½	17,000 00
1947.	April	1.	Boston Tunnel and Subway,	4	13,000 00
Investments,					\$118,000 00
Cash,					20,607 74
Total Resources,					<u>\$138,607 74</u>

HIGHWAYS, MAKING OF, DEBT AND SINKING FUND, No. 2.

HIGHWAYS, MAKING OF, SINKING FUND DEBT, No. 2.

"Highways, Making of, Debt" of the City of Boston, issued under chapter 323 of the Acts of 1891, chapters 401, 402 and 418 of the Acts of 1892, chapters 319 and 346 of the Acts of 1897, chapter 443 of the Acts of 1899, and chapter 465 of the Acts of 1901, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Highways, Making of, Sinking Fund, No. 2." The dates show when the debt becomes due.

1915.	July	1.	Laying Out and Construction of Highways,	4	\$500,000 00
Total, Financial Year, 1915-16,					\$500,000 00
1916.	July	1.	Laying Out and Construction of Highways,	4	\$700,000 00
1917.	Jan.	1.	Laying Out and Construction of Highways,	3½	499,000 00
Total, Financial Year, 1916-17,					1,199,000 00
Carried forward,					<u>\$1,699,000 00</u>

<i>Brought forward,</i>					\$1,699,000 00
1919.	July	1.	Laying Out and Construction of Highways:		
			Brighton,	3½	\$5,000 00
			East Boston,	3½	300,000 00
			Dorchester,	3½	250,000 00
			Roxbury and West Roxbury,	3½	175,000 00
Total, Financial Year, 1919-20,					730,000 00
1928.	Jan.	1.	Laying Out and Construction of Highways,	3½	\$750,000 00
Total, Financial Year, 1927-28,					750,000 00
1928.	July	1.	Laying Out and Construction of Highways,		
			Charlestown Street,	3½	\$5,000 00
	Oct.	1.	Laying Out and Construction of Highways,	3½	6,000 00
1929.	Jan.	1.	Laying Out and Construction of Highways,	3½	650 00
Total, Financial Year, 1928-29,					11,650 00
1929.	April	1.	Laying Out and Construction of Highways,	3½	\$44,800 00
1930.	Jan.	1.	Laying Out and Construction of Highways,	3½	507,000 00
Total, Financial Year, 1929-30,					551,800 00
1930.	July	1.	Laying Out and Construction of Highways,	3	\$3,550 00
	"	1.	Laying Out and Construction of Highways,	3½	461,000 00
	"	1.	Laying Out and Construction of Highways,		
			East Boston,	3½	200,000 00
1931.	Jan.	1.	Laying Out and Construction of Highways,		
			Charlestown Street,	3	150,000 00
Total, Financial Year, 1930-31,					814,550 00
1931.	Oct.	1.	Laying Out and Construction of Highways,		
			Dorchester,	3	\$20,000 00
Total, Financial Year, 1931-32,					20,000 00
1932.	June	1.	Laying Out and Construction of Highways:		
			Brighton,	3½	\$99,000 00
			Dorchester,	3½	130,000 00
			East Boston,	3½	100,000 00
			Roxbury and West Roxbury,	3½	125,000 00
	Oct.	1.	Laying Out and Construction of Highways,		
			Charlestown Street,	3½	30,000 00
	Dec.	31.	Highways, Making of,	3½	483,000 00
1933.	Jan.	1.	Laying Out and Construction of Highways,		
			Charlestown Street,	3½	5,000 00
Total, Financial Year, 1932-33,					972,000 00
1933.	June	1.	Highways, Making of,	3½	\$500,000 00
1934.	Jan.	1.	Highways, Making of,	3½	170,000 00
Total, Financial Year, 1933-34,					670,000 00
1935.	Dec.	1.	Highways, Making of,	3½	\$283,000 00
Total, Financial Year, 1935-36,					283,000 00
Total Debt,					<u>\$6,502,000 00</u>

HIGHWAYS, MAKING OF, SINKING FUND, No. 2.

Resources of the "Highways, Making of, Sinking Fund, No. 2," being Bonds and Cash. The dates show when the Bonds become due.

1915.	July	1.	Laying Out and Construction of Highways,	4	\$26,000 00
1916.	July	1.	Laying Out and Construction of Highways,	4	100,000 00
1917.	Jan.	1.	Laying Out and Construction of Highways,	3½	120,000 00
1918.	Oct.	1.	Bridge, Lauriat Avenue,	3½	13,000 00
	"	1.	Suffolk County Courthouse,	4	150,000 00
1919.	July	1.	Laying Out and Construction of Highways,	3½	91,000 00
	Oct.	1.	Almshouse, Long Island, New Power House		
			and Equipment,	3	8,000 00
1921.	Jan.	1.	Various Municipal Purposes, January 5,		
			1901,	3	83,500 00
	April	1.	Various Municipal Purposes, January 5,		
			1901,	3	17,000 00
	July	1.	Columbus Avenue, Asphalting,	4	1,000 00
	"	1.	Street Improvements,	4	6,000 00

Carried forward,

\$615,500 00

SINKING FUNDS DEPARTMENT.

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<i>Brought forward,</i>					\$615,500 00
1922.	June	1.	Laying Out and Construction of Highways,		
			Various Municipal Purposes,	3½	172,000 00
	July	1.	Street Improvements,	4	18,000 00
1923.	June	1.	Various Municipal Purposes,	3½	3,000 00
1924.	June	1.	Various Municipal Purposes,	3½	155,000 00
1925.	Dec.	1.	Abolition of Grade Crossing, Dorchester Avenue,	3½	286,000 00
	"	1.	Various Municipal Purposes,	3½	2,000 00
1927.	July	1.	Highways, Making of,	4	126,000 00
1930.	Jan.	1.	Laying Out and Construction of Highways,	3½	56,000 00
1931.	Jan.	1.	Various Municipal Purposes, January 5, 1901,	3	75,000 00
	April	1.	Laying Out and Construction of Highways,	3	11,000 00
	July	1.	Schoolhouses,	3½	91,000 00
	Oct.	1.	Laying Out and Construction of Highways, Dorchester,	3	20,000 00
	"	1.	Laying Out and Construction of New Highways,	3	50,000 00
1932.	June	1.	Laying Out and Construction of Highways,	3½	190,000 00
	Dec.	31.	Highways, Making of,	3½	178,000 00
1933.	Jan.	1.	Laying Out and Construction of Highways, Charlestown Street,	3½	5,000 00
	June	1.	Highways, Making of,	3½	16,000 00
1934.	Jan.	1.	Dorchester Street,	3½	180,000 00
	"	1.	Highways, Making of,	3½	30,000 00
	Oct.	1.	Charlestown Bridge,	4	10,000 00
1935.	Dec.	1.	Highways, Making of,	3½	18,000 00
1936.	June	1.	Playground, Wards 7 and 9,	3½	23,000 00
	July	1.	Highways, Making of,	4	6,000 00
1937.	Jan.	1.	Blue Hill and Other Avenues,	3½	40,000 00
1938.	July	1.	Blue Hill and Other Avenues,	3½	95,000 00
1942.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3	150,000 00
1947.	July	1.	Boston Tunnel and Subway,	4	150,000 00
					\$2,771,500 00

SERIAL BONDS.

Due July 1, 1914-19, \$3,000 annually.	Geneva Avenue, from Bowdoin Street to Columbia Road,	4	\$18,000 00
Due " 1, 1921-30, \$2,000 annually.	Geneva Avenue, from Bowdoin Street to Columbia Road,	4	20,000 00
Due Oct. 1, 1914-15, \$5,000 annually.	Meridian Street Bridge,	4	10,000 00
Due " 1, 1916-27, \$4,000 annually.	Meridian Street Bridge,	4	48,000 00
Due " 1, 1914-21, \$10,000 annually.	Chelsea Bridge North,	4	80,000 00
Due " 1, 1922.....	Chelsea Bridge North,	4	5,000 00
			181,000 00
Investments,			\$2,952,500 00
Cash,			134,936 56
Total Resources,			\$3,087,436 56

IMPROVED SEWERAGE SPECIAL DEBT AND SINKING FUND.

IMPROVED SEWERAGE SPECIAL SINKING FUND DEBT.

"Improved Sewerage Debt" of the City of Boston, issued under chapter 322 of the Acts of 1889, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Improved Sewerage Special Sinking Fund." The date shows when the debt becomes due.

1919.	July	1.	Improved Sewerage,	3½	\$500,000 00
Total Debt,					\$500,000 00

IMPROVED SEWERAGE SPECIAL SINKING FUND.

Resources of the "Improved Sewerage Special Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1914.	Oct.	1.	Various Municipal Purposes, 1894,	4	\$28,000 00
1919.	July	1.	New Buildings, City Hospital,	3½	14,500 00
	"	1.	Improved Sewerage,	3½	93,000 00
	"	1.	Various Municipal Purposes,	3½	10,000 00
1926.	June	1.	Franklin Union, Site,	3½	12,000 00
<i>Carried forward,</i>					\$157,500 00

<i>Brought forward,</i>					\$157,500 00
1928.	July	1.	Sewerage Loan,	3½	98,000 00
	"	1.	Laying Out and Construction of Highways,	3½	5,000 00
	Oct.	1.	Public Parks,	3½	26,000 00
1934.	Jan.	1.	Separate Systems of Drainage,	3½	40,000 00
1938.	July	1.	Blue Hill and Other Avenues,	3½	12,000 00
1945.	April	1.	Boston Tunnel and Subway,	3½	26,000 00
1947.	April	1.	Boston Tunnel and Subway,	4	7,000 00
					\$371,500 00

SERIAL BONDS.

Due July 1, 1914-16, \$2,000 annually.	Chelsea North, Temporary Bridge,	3½	\$6,000 00	
Due " 1, 1914-21, \$2,000 annually.	Fire Department, Repair Shop,	3½	16,000 00	
Due " 1, 1914.....	New Quarters for Fire-boat Crew, Boston Side,	3½	1,000 00	
				23,000 00
Investments,				\$394,500 00
Cash,				25,251 23
Total Resources,				\$419,751 23

NEW FERRY LANDING DEBT AND SINKING FUND.

NEW FERRY LANDING SINKING FUND DEBT.

"New Ferry Landing Debt" of the City of Boston, issued under chapter 435 of the Acts of 1895, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "New Ferry Landing Sinking Fund." The dates show when the debt becomes due.

1916.	Oct.	1.	New Ferry Landing,	4	\$25,000 00
1917.	Jan.	1.	New Ferry Landing,	4	5,000 00
Total, Financial Year, 1916-17,					\$30,000 00
1917.	July	1.	New Ferry Landing,	4	\$5,000 00
	Oct.	1.	New Ferry Landing,	4	5,000 00
1918.	Jan.	1.	New Ferry Landing,	3½	103,800 00
Total, Financial Year, 1917-18,					113,800 00
1918.	April	1.	New Ferry Landing,	3½	25,000 00
1919.	July	1.	New Ferry Landing,	3½	331,200 00
Total Debt,					\$500,000 00

NEW FERRY LANDING SINKING FUND.

Resources of the "New Ferry Landing Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1915.	July	1.	Laying Out and Construction of Highways,	4	\$33,000 00
1916.	Jan.	1.	Various Municipal Purposes,	4	2,000 00
1917.	Jan.	1.	New Ferry Landing,	4	5,000 00
1918.	Jan.	1.	Public Park Construction,	4	50,000 00
1919.	July	1.	New Ferry Landing,	3½	50,000 00
1921.	Jan.	1.	Various Municipal Purposes, January 5, 1901,	3	50,000 00
1926.	June	1.	Franklin Union, Site,	3½	26,000 00
1934.	Jan.	1.	Public Parks,	3½	50,000 00
1935.	Jan.	1.	Playground, Wards 7 and 9,	3½	25,000 00
1938.	July	1.	Blue Hill and Other Avenues,	3½	4,000 00
1947.	April	1.	Boston Tunnel and Subway,	4	22,000 00
Investments,					\$317,000 00
Cash,					42,643 41
Total Resources,					\$359,643 41

NEW PUBLIC LIBRARY SPECIAL DEBT AND SINKING FUND.

NEW PUBLIC LIBRARY SPECIAL SINKING FUND DEBT.

"New Public Library Special Debt" of the City of Boston, issued under chapter 68 of the Acts of 1889, chapter 324 of the Acts of 1891, and chapter 475

SINKING FUNDS DEPARTMENT.

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of the Acts of 1898, of the Legislature of Massachusetts, to be paid as it becomes due from the "New Public Library Special Debt Sinking Fund."

1923.	Jan.	1.	Library Building, Copley Square (chapter 324, Acts 1891),	4	\$195,000 00	
Total, Financial Year, 1922-23,						\$195,000 00
1923.	Oct.	1.	Library Building, Copley Square (chapter 324, Acts 1891),	4	\$325,000 00	
Total, Financial Year, 1923-24,						325,000 00
1925.	Jan.	1.	Library Building, Copley Square (chapter 324, Acts 1891),	4	\$48,500 00	
Total, Financial Year, 1924-25,						48,500 00
Total Debt,						<u>\$568,500 00</u>

NEW PUBLIC LIBRARY SPECIAL DEBT SINKING FUND.

Resources of the "New Public Library Special Debt Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1918.	July	1.	Faneuil Hall Building, Reconstruction,	3½	\$80,000 00	
1919.	April	1.	Various Municipal Purposes, February 27, 1899,	3½	213,100 00	
1922.	July	1.	Street Improvements,	4	7,000 00	
1923.	Jan.	1.	Library Building, Copley Square,	4	22,000 00	
1925.	Jan.	1.	Library Building, Copley Square,	4	4,000 00	
1926.	June	1.	Franklin Union, Site,	3½	13,000 00	
1932.	Dec.	31.	Highways, Making of,	3½	32,000 00	
1934.	Jan.	1.	Highways, Making of,	3½	25,000 00	
1945.	April	1.	Boston Tunnel and Subway,	3½	18,500 00	
1947.	April	1.	Boston Tunnel and Subway,	4	13,000 00	
Investments,					\$427,600 00	
Cash,					25,406 15	
Total Resources,					<u>\$453,006 15</u>	

PUBLIC PARK SPECIAL DEBT AND SINKING FUND.

PUBLIC PARK SPECIAL SINKING FUND DEBT.

"Public Park Special Debt" of the City of Boston, issued under chapter 304, Acts of 1886, chapter 312, Acts of 1887, chapter 392, Acts of 1888, chapters 271 and 444, Acts of 1890, chapters 301 and 323, Acts of 1891, chapter 396, Acts of 1894, chapter 453, Acts of 1896, chapters 319 and 394, Acts of 1897, chapter 313, Acts of 1898, and chapter 303, Acts of 1899, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Public Park Special Sinking Fund." The dates show when the debt becomes due.

1917.	July	1.	Public Park Lands (chapter 312, 1887),	3½	\$400,000 00	
1918.	Jan.	1.	Public Park Construction (chapter 304, 1886),	4	450,000 00	
Total, Financial Year, 1917-18,						\$850,000 00
1918.	April	1.	Public Park Construction (chapter 304, 1886),	4	\$5,000 00	
	July	1.	Public Park Construction (chapter 304, 1886),	4	5,000 00	
	Oct.	1.	Public Park Construction (chapter 304, 1886),	4	40,000 00	
1919.	Jan.	1.	Public Park Construction (chapter 304, 1886),	4	480,500 00	
Total, Financial Year, 1918-19,						530,500 00
1919.	April	1.	Public Park Construction (chapter 304, 1886),	4	\$16,000 00	
	July	1.	Public Park Construction (chapter 304, 1886),	4	3,500 00	
Carried forward,					\$19,500 00	\$1,380,500 00

<i>Brought forward,</i>						\$19,500 00	\$1,380,500 00
1920.	Jan.	1.	Public Park Construction (chapter 304, 1886),	4		439,500 00	
	Jan.	1.	Public Lands (chapter 392, 1888),	3½		600,000 00	
Total, Financial Year, 1919-20,							1,059,000 00
1920.	July	1.	Public Park Construction (chapter 304, 1886),	4		\$16,400 00	
	Oct.	1.	Public Park Construction (chapter 304, 1886),	4		44,100 00	
1921.	Jan.	1.	Public Park Construction (chapter 304, 1886),	4		500,000 00	
Total, Financial Year, 1920-21,							560,500 00
1921.	June	1.	Public Parks (chapter 301, 1891),	4		\$700,000 00	
Total, Financial Year, 1921-22,							700,000 00
1922.	April	1.	Public Parks (chapter 301, 1891),	4		\$200,000 00	
	Oct.	1.	Public Parks " "	4		301,000 00	
1923.	Jan.	1.	Public Parks " "	4		250,000 00	
Total, Financial Year, 1922-23,							751,000 00
1923.	July	1.	Public Parks (chapter 301, 1891),	4		\$500,000 00	
	Oct.	1.	Public Parks " "	4		450,000 00	
1924.	Jan.	1.	Public Parks " "	4		99,000 00	
Total, Financial Year, 1923-24,							1,049,000 00
1924.	Oct.	1.	Public Parks (chapter 301, 1891),	4		\$1,000,000 00	
1925.	Jan.	2.	Public Parks (chapter 396, 1894),	4		1,000,000 00	
Total, Financial Year, 1924-25,							2,000,000 00
1927.	Jan.	1.	Public Parks (chapter 453, Acts 1896),	3½		\$500,000 00	
Total, Financial Year, 1926-27,							500,000 00
1927.	Oct.	1.	Public Parks (chapter 453, Acts 1896),	4		\$50,000 00	
1928.	Jan.	1.	Public Parks " "	3½		450,000 00	
Total, Financial Year, 1927-28,							500,000 00
1928.	April	1.	Public Parks (chapter 313, Acts 1898),	3½		\$50,000 00	
	Oct.	1.	Public Parks " "	3½		450,000 00	
Total, Financial Year, 1928-29,							500,000 00
1929.	July	1.	Public Parks (chapter 303, Acts 1899),	3½		\$500,000 00	
1930.	Jan.	1.	Public Parks (chapters 319 and 394, Acts of 1897),	3½		486,000 00	
Total, Financial Year, 1929-30,							986,000 00
1930.	July	1.	Public Parks (chapters 319 and 394, Acts 1897),	3½		\$130,000 00	
Total, Financial Year, 1930-31,							130,000 00
1934.	Jan.	1.	Public Parks (chapter 323, Acts of 1891),	3½		\$170,000 00	
Total, Financial Year, 1933-34,							170,000 00
1935.	July	1.	Public Parks (chapter 323, Acts 1891),	3½		\$19,000 00	
	Oct.	1.	Public Parks " "	3½		9,500 00	
	Dec.	1.	Public Parks " "	3½		5,000 00	
1936.	Jan.	1.	Public Parks " "	3½		33,000 00	
Total, Financial Year, 1935-36,							66,500 00
1937.	Jan.	1.	Public Park Construction (chapter 304, Acts 1886),	3½		\$500,000 00	
Total, Financial Year, 1936-37,							500,000 00
Total Debt,							<u>\$10,852,500 00</u>

PUBLIC PARK SPECIAL SINKING FUND.

Resources of the "Public Park Special Sinking Fund," being Bonds and Cash.
The dates show when the Bonds become due.

SINKING FUNDS DEPARTMENT.

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1914.	Oct.	1.	Public Parks,	4			
1915.	April	1.	Various Municipal Purposes, January 4, 1895,	4	\$17,000	00	\$205,000 00
	"	1.	Various Municipal Purposes, 1894,	4	113,000	00	
	Oct.	1.	Various Municipal Purposes, April 22, 1895,	4	121,000	00	
	"	1.	Various Municipal Purposes, July 8, 1895,	4	30,000	00	
1916.	Jan.	4.	Library Building, Copley Square,	4	29,000	00	
							310,000 00
1916.	July	1.	Sidewalk Assessment, Repayment of,	4			100,000 00
1917.	July	1.	Public Park Loan,	3½	\$3,000	00	
	"	1.	Mass Ferry Landing,	4	5,000	00	
	"	1.	Massachusetts Historical Society Building,	3½	13,000	00	
							21,000 00
1918.	Jan.	1.	Public Park Construction,	4			110,000 00
1918.	April	1.	Wire Department,	3½	\$50,000	00	
	Oct.	1.	Public Park Construction,	4	23,500	00	
	"	1.	Bridge, Lauriat Avenue,	3½	8,000	00	
1919.	Jan.	1.	Public Park Construction,	4	173,000	00	
							254,500 00
1920.	Jan.	1.	Public Park Lands,	3½	\$34,000	00	
	"	1.	Public Park Loan,	3½	171,000	00	
	"	1.	Public Park Construction,	4	11,000	00	
							216,000 00
1920.	Oct.	1.	Public Park Construction,	4	\$27,100	00	
1921.	Jan.	1.	Various Municipal Purposes, January 5, 1901,	3	100,700	00	
	"	1.	Playgrounds, Construction,	3	25,000	00	
	"	1.	Public Park Construction,	4	68,000	00	
							220,800 00
1921.	June	1.	Public Parks,	4	\$14,000	00	
	"	1.	Public Park Loan,	4	63,000	00	
	Oct.	1.	Various Municipal Purposes, July 3, 1904,	3	100,000	00	
1922.	Jan.	1.	Street Improvements,	3½	211,000	00	
							388,000 00
1922.	June	1.	Various Municipal Purposes,	3½	\$7,000	00	
	July	1.	Street Improvements,	4	4,000	00	
	Oct.	1.	Public Parks,	3½	25,000	00	
	"	1.	Public Parks,	4	275,000	00	
1923.	Jan.	1.	Copley Square, Building on or near,	3½	48,000	00	
	"	1.	Beacon Street, Building Line,	3½	33,000	00	
	"	1.	Bath House, North End,	3½	40,000	00	
	"	1.	Public Parks,	4	1,000	00	
							433,000 00
1923.	June	1.	Bath House, North End,	3½	\$10,000	00	
	"	1.	Various Municipal Purposes,	3½	72,000	00	
	July	1.	Public Parks,	4	48,000	00	
	Oct.	1.	Public Parks,	4	3,000	00	
	"	1.	Public Park Loan,	4	26,000	00	
1924.	Jan.	1.	Public Parks,	4	94,000	00	
	"	1.	Various Municipal Purposes, January 2, 1904,	3½	100,000	00	
							353,000 00
1924.	July	1.	Public Park, Wards 6 and 7,	4	\$100,000	00	
	Oct.	1.	Public Park, Wards 6 and 7,	4	100,000	00	
1925.	Jan.	2.	Public Parks,	4	151,000	00	
							351,000 00
1925.	Oct.	1.	Public Park, Wards 6 and 7,	4	\$108,000	00	
	Dec.	1.	Various Municipal Purposes,	3½	7,000	00	
	"	1.	Abolition of Grade Crossing, Dorchester Avenue,	3½	251,000	00	
							366,000 00
1927.	July	1.	Various Municipal Purposes,	4	\$4,000	00	
1928.	Jan.	1.	Public Park Loan,	3½	5,000	00	
							9,000 00
1928.	July	1.	Sewerage Loan,	3½	\$118,000	00	
	Oct.	1.	Public Parks,	3½	93,000	00	
							211,000 00
1929.	Oct.	1.	Schoolhouses,	3½	\$150,000	00	
1930.	Jan.	1.	Public Park Loan,	3½	28,000	00	
							178,000 00
1930.	July	1.	Playgrounds,	3	\$54,000	00	
1931.	Jan.	1.	Laying Out and Construction of Highways, Charlestown Street,	3	117,000	00	
	"	1.	Public Park Construction,	3	25,000	00	
							196,000 00
1931.	April	1.	Laying Out and Construction of Highways,	3	\$50,000	00	
	July	1.	Laying Out and Construction of Highways,	3½	250,000	00	
1932.	Jan.	1.	Laying Out and Construction of Highways,	3	126,000	00	
	"	1.	Public Parks,	3	131,000	00	
	"	1.	Completion of School Buildings,	3	195,200	00	
							752,200 00
1934.	Jan.	1.	Charles River Basin,	3½	\$130,000	00	
	"	1.	Separate Systems of Drainage,	3½	360,000	00	
			<i>Carried forward,</i>		\$490,000	00	\$4,674,500 00

<i>Brought forward,</i>					\$490,000 00	\$4,674,500 00
1934.	Jan.	1.	Public Parks,	3½	70,000 00	
1934.	Oct.	1.	Rapid Transit,	4		560,000 00
1936.	July	1.	Blue Hill and Other Avenues,	4		50,000 00
1937.	July	1.	Stony Brook Improvement,	3½	\$32,000 00	200,000 00
	"	1.	Land and Buildings for Schools,	4	115,000 00	
	"	1.	Separate Systems of Drainage,	4	92,000 00	
	"	1.	Sewerage Loan,	4	70,000 00	
1938.	Jan.	1.	Stony Brook Improvement,	3½	26,000 00	
1942.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3		335,000 00
1946.	June	1.	Boston Tunnel and Subway,	3½		50,000 00
						161,000 00
						<u>\$6,030,500 00</u>

SERIAL BONDS.

Due July 1, 1914-19,	\$500 annually.	Locker Building, Franklin Field, Completion of,	4	\$3,000 00	
Due "	1, 1914-15, \$1,000 annually.	New Fireboat,	4	2,000 00	
Due "	1, 1914-20, \$2,000 annually.	Playgrounds, Improvements,	4	14,000 00	
Due "	1, 1921-27, \$1,000 annually.	Playgrounds, Improvements,	4	7,000 00	
Due "	1, 1914-15, \$500 annually.	Savin Hill Park Loans, etc.,	4	1,000 00	
Due "	1, 1914-20, \$1,000 annually.	Neponset Playground, Filling and Grading,	4	7,000 00	
Due Oct. 1, 1914,		Norfolk Street Widening,	4	10,000 00	
Due "	1, 1914-17, \$1,000 annually.	New Buildings, Long Island, Plans, etc.,	4	4,000 00	
Due "	1, 1914-17, \$1,000 annually.	Separate Systems of Drainage,	4	4,000 00	
Due "	1, 1914-15, \$2,000 annually.	Everett Street, Brighton, Property,	4	4,000 00	
Due "	1, 1916-32, \$1,000 annually.	Everett Street, Brighton, Property,	4	17,000 00	
Due "	1, 1914-23, \$1,000 annually.	Tenean Beach, Property,	4	10,000 00	
Due "	1, 1914-23, \$1,000 annually.	Highland Park, Additional Land,	4	10,000 00	
Due "	1, 1914-23, \$2,500 annually.	Playground, Hyde Park,	4	25,000 00	
					<u>118,000 00</u>
Investments,					\$6,148,500 00
Cash,					149,133 10
Total Resources,					<u>\$6,297,633 10</u>

RAPID TRANSIT LOAN DEBT AND SINKING FUND.

RAPID TRANSIT LOAN SINKING FUND DEBT.

"Rapid Transit Loan Debt," issued under chapter 548, Acts of 1894, and chapter 500, Acts of 1897, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Rapid Transit Loan Sinking Fund." The dates show when the debt becomes due.

1934.	Oct.	1.	Rapid Transit,	4		\$50,000 00
1935.	April	1.	Rapid Transit,	4	\$1,000,000 00	
1936.	Jan.	1.	Rapid Transit,	3½	250,000 00	
1936.	April	1.	Rapid Transit,	3½	\$500,000 00	1,250,000 00
	Oct.	1.	Rapid Transit,	3½	1,500,000 00	
1937.	July	1.	Rapid Transit,	3½		2,000,000 00
1938.	April	1.	Rapid Transit Alterations,	3½		865,000 00
1940.	July	1.	Rapid Transit Alterations,	3½		200,000 00
1942.	Jan.	1.	Rapid Transit,	3		50,000 00
						1,000 00
Total Debt,						<u>\$4,416,000 00</u>

RAPID TRANSIT LOAN SINKING FUND.

Resources of the "Rapid Transit Loan Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1915.	April	1.	Various Municipal Purposes, April 22, 1895,	4	\$137,000 00
1916.	Jan.	4.	Library Building, Copley Square, Furnishing,	4	15,000 00
1919.	Oct.	1.	Almsbouse, Long Island, New Power House, etc.,	3½	10,000 00
1921.	July	1.	Various Municipal Purposes, July 3, 1901,	3½	110,000 00
	Oct.	1.	Billings Field, Construction,	3	10,000 00
	"	1.	Garbage Plant, Spectacle Island,	3	40,000 00
1931.	April	1.	Laying Out and Construction of Highways,	3	70,000 00
	July	1.	Schoolhouses,	3½	35,000 00
1932.	Dec.	31.	Land and Buildings for Schools,	3½	60,000 00
1934.	Jan.	1.	Brandon Street and Belgrade Avenue,	3½	70,000 00
1935.	April	1.	Rapid Transit,	4	103,000 00
1936.	Jan.	1.	Rapid Transit,	3½	50,000 00
	April	1.	Rapid Transit,	3½	3,000 00
	July	1.	Charlestown Bridge,	4	30,000 00
	"	1.	Sewerage Loan,	4	2,000 00
	Oct.	1.	Rapid Transit,	3½	10,000 00
1937.	July	1.	Rapid Transit,	3½	9,000 00
1938.	Jan.	1.	Stony Brook Improvement,	3½	30,000 00
	July	1.	Blue Hill and Other Avenues,	3½	19,000 00
1941.	Oct.	1.	Rapid Transit, East Boston Tunnel,	3	55,000 00
1944.	June	1.	Cambridge Bridge,	3½	92,000 00
	"	1.	Sewerage Loan,	3½	47,000 00
	"	1.	Boston Tunnel and Subway,	3½	3,000 00
1945.	April	1.	Boston Tunnel and Subway,	3½	127,000 00
1946.	June	1.	Boston Tunnel and Subway,	3	97,000 00
	July	1.	Boston Tunnel and Subway,	4	105,000 00
1947.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3½	28,000 00
	April	1.	Boston Tunnel and Subway,	4	47,000 00
					\$1,414,000 00

SERIAL BONDS.

Due July 1, 1914-26, \$4,000 annually.	Curtis Hall, Recon- struction of,	3½	\$52,000 00
Due Oct. 1, 1914-17, \$3,000 annually.	Refuse Destructor Site, Spectacle Island,	4	12,000 00
Due Oct. 1, 1914-32, \$1,000 annually.	Municipal Building, South Boston,	4	19,000 00
Due Oct. 1, 1914-19, \$2,000 annually.	Harvard Avenue, Brighton Property,	4	12,000 00
Due Oct. 1, 1914-20, \$5,000 annually.	Harvard Avenue, Brighton Property,	4	35,000 00
			130,000 00
Investments,			\$1,544,000 00
Cash,			50,436 58
Total Resources,			\$1,594,436 58

RAPID TRANSIT, BOSTON TUNNEL AND SUBWAY, DEBT AND
SINKING FUND.

RAPID TRANSIT, BOSTON TUNNEL AND SUBWAY, DEBT.

“Rapid Transit, Boston Tunnel and Subway, Debt,” of the City of Boston, issued under chapter 534, Acts of 1902, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the “Boston Tunnel and Subway Sinking Fund.” The dates show when the debt becomes due.

1944.	Jan.	1.	Boston Tunnel and Subway,	3½		\$50,000 00
1944.	June	1.	Boston Tunnel and Subway,	3½		950,000 00
1945.	April	1.	Boston Tunnel and Subway,	3½	\$556,700 00	
	July	1.	Boston Tunnel and Subway,	3½	1,400,000 00	
						1,956,700 00
1946.	April	1.	Boston Tunnel and Subway,	3½	\$11,000 00	
	June	1.	Boston Tunnel and Subway,	3½	489,000 00	
	July	1.	Boston Tunnel and Subway,	4	1,000,000 00	
1947.	Jan.	1.	Boston Tunnel and Subway,	3½	13,150 00	
						1,513,150 00
1947.	April	1.	Boston Tunnel and Subway,	4	\$486,850 00	
	July	1.	Boston Tunnel and Subway,	4	1,000,000 00	
						1,486,850 00
1948.	June	1.	Boston Tunnel and Subway,	4		2,000,000 00
1949.	April	1.	Boston Tunnel and Subway,	3½		300,000 00
			Total Debt,			\$8,256,700 00

RAPID TRANSIT, BOSTON TUNNEL AND SUBWAY, SINKING FUND.

Resources of the "Rapid Transit, Boston Tunnel and Subway, Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1921.	July	1.	Various Municipal Purposes, January 5, 1901,	3½	\$100,000 00
	Oct.	1.	Completion of Morgue,	3	10,000 00
	"	1.	Ground for Target Practice,	3	20,500 00
1928.	Oct.	1.	Public Parks,	3½	18,000 00
1937.	July	1.	Charlestown Bridge,	3½	14,000 00
	"	1.	Rapid Transit,	3½	25,000 00
1938.	Jan.	1.	Commonwealth of Massachusetts,	3½	100,000 00
1940.	July	1.	Commonwealth of Massachusetts,	3½	50,000 00
1944.	Jan.	1.	Commonwealth of Massachusetts,	3½	1,000 00
1945.	Jan.	1.	Cambridge Bridge,	3½	8,000 00
1946.	June	1.	Boston Tunnel and Subway,	3½	20,000 00
	July	1.	Boston Tunnel and Subway,	4	170,000 00
1947.	Jan.	1.	Boston Tunnel and Subway,	3½	10,000 00
	April	1.	Boston Tunnel and Subway,	4	127,000 00
	July	1.	Boston Tunnel and Subway,	4	7,300 00
					\$680,800 00

SERIAL BONDS.

Due Oct. 1, 1914-24, \$3,000 annually.	East Boston Court-house and Police Station,	4	\$33,000 00	
Due " 1, 1914-24, \$2,000 annually.	Municipal Building, Ward 7,	4	22,000 00	
				55,000 00
Investments,				\$735,800 00
Cash,				52,866 47
Total Resources,				
				\$788,666 47

RAPID TRANSIT LOAN, BOYLSTON STREET SUBWAY, DEBT AND SINKING FUND.

(Formerly Riverbank Subway.)

RAPID TRANSIT LOAN, BOYLSTON STREET SUBWAY, SINKING FUND DEBT.

"Rapid Transit Loan, Boylston Street Subway Debt," issued under chapter 741, Acts of 1911, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Rapid Transit Loan, Boylston Street Subway, Sinking Fund." The dates show when the debt becomes due:

1947.	Oct.	1.	Riverbank Subway,	4	\$5,000 00
1950.	July	1.	Riverbank Subway,	4	500,000 00
1957.	Oct.	1.	Boylston Street Subway,	4	1,500,000 00
1958.	Jan.	1.	Boylston Street Subway,	4	1,000,000 00
	Nov.	1.	Boylston Street Subway,	4½	1,300,000 00
Total Debt,					
					\$4,305,000 00

RAPID TRANSIT LOAN, BOYLSTON STREET SUBWAY, SINKING FUND.

Resources of the "Rapid Transit Loan, Boylston Street Subway, Sinking Fund," being Bonds and Cash. The date shows when the Bonds become due.

1937.	July	1.	Charlestown Bridge,	3½	\$1,000 00
Investments,					\$1,000 00
Cash,					494 59
Total Resources,					
					\$1,494 59

RAPID TRANSIT LOAN, CAMBRIDGE CONNECTION, DEBT AND SINKING FUND.

RAPID TRANSIT LOAN, CAMBRIDGE CONNECTION, SINKING FUND DEBT.

"Rapid Transit Loan, Cambridge Connection, Debt," issued under chapter 520, Acts of 1906, of the Legislature of Massachusetts, to be paid as it becomes

due from the resources of the "Rapid Transit Loan, Cambridge Connection, Sinking Fund." The dates show when the debt becomes due.

1949.	April	1.	Rapid Transit, Cambridge Connection,	3½	\$350,000 00
1950.	July	1.	Rapid Transit, Cambridge Connection,	4	500,000 00
1956.	July	1.	Rapid Transit, Cambridge Connection,	3½	46,000 00
	Nov.	1.	Rapid Transit, Cambridge Connection,	4	404,000 00
1957.	May	1.	Rapid Transit, Cambridge Connection,	4	31,000 00
	Oct.	1.	Rapid Transit, Cambridge Connection,	4	119,000 00
Total Debt,					<u>\$1,450,000 00</u>

RAPID TRANSIT LOAN, CAMBRIDGE CONNECTION, SINKING FUND.

Resources of the "Rapid Transit Loan, Cambridge Connection, Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1918.	Jan.	1.	Nurses' Home, Site, etc.,	3½	\$3,000 00
1923.	June	1.	Various Municipal Purposes,	3½	14,000 00
	"	1.	Bath House, North End,	3½	2,000 00
1937.	July	1.	Charlestown Bridge,	3½	23,000 00
Investments,					\$42,000 00
Cash,					15,423 61
Total Resources,					<u>\$57,423 61</u>

RAPID TRANSIT LOAN, DORCHESTER TUNNEL, DEBT.

RAPID TRANSIT LOAN, DORCHESTER TUNNEL, SINKING FUND DEBT.

"Rapid Transit Loan, Dorchester Tunnel, Debt," issued under chapter 741, Acts of 1911, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Rapid Transit Loan, Dorchester Tunnel, Sinking Fund." The dates show when the debt becomes due.

1957.	Jan.	1.	Dorchester Tunnel,	4	\$300,000 00
	Oct.	1.	Dorchester Tunnel,	4	1,000,000 00
1958.	Jan.	1.	Dorchester Tunnel,	4	450,000 00
Total Debt,					<u>\$1,750,000 00</u>

RAPID TRANSIT LOAN, EAST BOSTON TUNNEL, DEBT
AND SINKING FUND.

RAPID TRANSIT LOAN, EAST BOSTON TUNNEL, SINKING FUND DEBT.

"Rapid Transit Loan, East Boston Tunnel, Debt," issued under chapter 548, Acts of 1894, chapter 500, Acts of 1897, chapter 190, Acts of 1903, and chapter 187, Acts of 1905, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Rapid Transit Loan, East Boston Tunnel, Sinking Fund." The dates show when the debt becomes due.

1937.	July	1.	Rapid Transit,	3½	\$135,000 00
1938.	Jan.	1.	Rapid Transit,	3½	200,000 00
					\$335,000 00
1941.	Oct.	1.	Rapid Transit, East Boston Tunnel,	3	\$250,000 00
1942.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3	200,000 00
					450,000 00
1942.	June	1.	Rapid Transit, East Boston Tunnel,	3½	\$500,000 00
1943.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3½	300,000 00
					800,000 00
1943.	June	1.	Rapid Transit, East Boston Tunnel,	3½	1,300,000 00
1944.	June	1.	Rapid Transit, East Boston Tunnel,	3½	133,000 00
1945.	July	1.	Rapid Transit, East Boston Tunnel,	3½	100,000 00
1947.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3½	75,000 00
1957.	July	1.	Rapid Transit, East Boston Tunnel,	4	50,000 00
Total Debt,					<u>\$3,243,000 00</u>

RAPID TRANSIT LOAN, EAST BOSTON TUNNEL, SINKING FUND.

Resources of the "Rapid Transit Loan, East Boston Tunnel, Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1932.	Jan.	1.	Carleton Street,	3	\$42,000 00
1934.	Jan.	1.	Dorchester Street,	3½	20,000 00
1936.	April	1.	Rapid Transit,	3	1,000 00
1937.	July	1.	Charlestown Bridge,	3½	101,000 00
	"	1.	Rapid Transit,	3½	44,000 00
1938.	Oct.	1.	Cambridge Bridge,	3½	50,000 00
1943.	June	1.	Rapid Transit, East Boston Tunnel,	3½	51,000 00
1944.	June	1.	Rapid Transit, East Boston Tunnel,	3½	10,000 00
1945.	Jan.	1.	Cambridge Bridge,	3½	5,000 00
1946.	June	1.	Boston Tunnel and Subway,	3½	53,000 00
	July	1.	Boston Tunnel and Subway,	4	50,000 00
1947.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3½	47,000 00
1957.	July	1.	Rapid Transit, East Boston Tunnel,	4	13,000 00
Investments,					\$487,000 00
Cash,					190,235 99
Total Resources,					<u>\$677,235 99</u>

RAPID TRANSIT LOAN, EAST BOSTON TUNNEL EXTENSION, DEBT.

RAPID TRANSIT LOAN, EAST BOSTON TUNNEL EXTENSION, SINKING FUND DEBT.

"Rapid Transit Loan, East Boston Tunnel Extension Debt," issued under chapter 741, Acts of 1911, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Rapid Transit Loan, East Boston Tunnel Extension, Sinking Fund." The dates show when the debt becomes due.

1957.	Jan.	1.	East Boston Tunnel Extension,	4	\$200,000 00
	Oct.	1.	East Boston Tunnel Extension,	4	200,000 00
1958.	Jan.	1.	East Boston Tunnel Extension,	4	650,000 00
Total Debt,					<u>\$1,050,000 00</u>

RAPID TRANSIT LOAN, CHARLESTOWN BRIDGE, DEBT AND SINKING FUND No. 2.

RAPID TRANSIT LOAN, CHARLESTOWN BRIDGE, SINKING FUND DEBT, No. 2.

"Rapid Transit Loan, Charlestown Bridge, Debt," issued under chapter 548, Acts of 1894, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Rapid Transit Loan, Charlestown Bridge, Sinking Fund, No. 2." The dates show when the debt becomes due.

1938.	July	1.	Charlestown Bridge,	3½	\$200,000 00
1939.	July	1.	Charlestown Bridge,	3½	\$200,000 00
1940.	Jan.	1.	Charlestown Bridge,	3½	200,000 00
					<u>400,000 00</u>
1940.	July	1.	Charlestown Bridge,	3½	200,000 00
1942.	Jan.	1.	Charlestown Bridge,	3	5,000 00
Total Debt,					<u>\$805,000 00</u>

RAPID TRANSIT LOAN, CHARLESTOWN BRIDGE, SINKING FUND, No. 2.

Resources of the "Rapid Transit Loan, Charlestown Bridge, Sinking Fund, No. 2," being Bonds and Cash. The dates show when the Bonds become due.

1921.	July	1.	Various Municipal Purposes, July 3, 1901,	3½	\$600 00
1934.	Jan.	1.	Hyde Park Avenue,	3½	20,000 00
1937.	July	1.	Charlestown Bridge,	3½	16,000 00
	"	1.	Rapid Transit,	3½	1,000 00
1938.	July	1.	Blue Hill and Other Avenues,	3½	11,000 00
1941.	Oct.	1.	Rapid Transit, East Boston Tunnel,	3	70,000 00
1945.	Jan.	1.	Cambridge Bridge,	3½	8,000 00
1946.	June	1.	Boston Tunnel and Subway,	3½	23,000 00
1947.	April	1.	Boston Tunnel and Subway,	4	33,000 00
1957.	July	1.	East Boston Tunnel,	4	14,000 00
Investments,					\$196,600 00
Cash,					67,514 28
Total Resources,					<u>\$264,114 28</u>

SCHOOLHOUSES DEBT AND SINKING FUND, No. 1.

SCHOOLHOUSES SINKING FUND DEBT, No. 1.

"Schoolhouses Debt" of the City of Boston, issued under chapter 408, Acts of 1895, and chapter 239, Acts of 1899, and chapter 450, Acts of 1907, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Schoolhouses Sinking Fund, No. 1."

1928.	June	1.	Land and Buildings for Schools,	4	\$250,000 00
1929.	April	1.	Land and Buildings for Schools,	3½	250,000 00
1931.	Jan.	1.	Normal School Building and Land (Acts 1899),	3	5,000 00
1935.	July	1.	Schoolhouses (Acts, 1895),	4	500,000 00
Total Debt,					<u>\$1,005,000 00</u>

SCHOOLHOUSES SINKING FUND, No. 1.

Resources of the "Schoolhouses Sinking Fund, No. 1," being Bonds and Cash. The dates show when the Bonds become due.

1918.	July	1.	New Buildings, City Hospital,	3½	\$13,000 00
1919.	July	1.	Various Municipal Purposes,	3½	19,000 00
1920.	Jan.	1.	Public Park Construction,	4	100,000 00
1922.	June	1.	Various Municipal Purposes,	3½	5,000 00
1925.	Dec.	1.	Various Municipal Purposes,	3½	15,000 00
1926.	June	1.	Franklin Union, Site,	3½	2,000 00
1931.	April	1.	Laying Out and Construction of Highways,	3	9,000 00
1932.	June	1.	Broadway Bridge, Rebuilding,	3½	10,000 00
	"	1.	Laying Out and Construction of Highways,	3½	25,000 00
1934.	Jan.	1.	Highways, Making of,	3½	20,000 00
1935.	July	1.	Schoolhouses,	4	25,000 00
1947.	April	1.	Boston Tunnel and Subway,	4	10,000 00
Investments,					\$253,000 00
Cash,					22,449 26
Total Resources,					<u>\$275,449 26</u>

SEPARATE SYSTEMS OF DRAINAGE DEBT AND SINKING FUND,
No. 1.

SEPARATE SYSTEMS OF DRAINAGE SINKING FUND DEBT, No. 1.

"Separate Systems of Drainage Debt" of the City of Boston, issued under chapter 383, Acts of 1903, and chapter 485, Acts of 1907, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Separate Systems of Drainage Sinking Fund, No. 1." The dates show when the debt becomes due.

1934.	Jan.	1.	Separate Systems of Drainage,	3½	\$400,000 00
	June	1.	Separate Systems of Drainage,	3½	200,000 00
1935.	Jan.	1.	Separate Systems of Drainage,	3½	600,000 00
	Dec.	1.	Separate Systems of Drainage,	3½	600,000 00
1936.	July	1.	Separate Systems of Drainage,	4	600,000 00
1937.	July	1.	Separate Systems of Drainage,	4	500,000 00
1938.	June	1.	Separate Systems of Drainage,	4	400,000 00
Total Debt,					<u>\$3,300,000 00</u>

SEPARATE SYSTEMS OF DRAINAGE SINKING FUND, No. 1.

Resources of the "Separate Systems of Drainage Sinking Fund, No. 1," being Bonds and Cash. The dates show when the Bonds become due.

1921.	April	1.	Various Municipal Purposes, January 5, 1901,	3	\$74,000 00
1922.	Jan.	1.	Street Improvements,	3½	27,000 00
1923.	Oct.	1.	Public Park Loan,	4	100,000 00
1931.	July	1.	Schoolhouses,	3½	10,000 00
Carried forward,					<u>\$211,000 00</u>

<i>Brought forward,</i>						\$211,000 00
1932.	June	1.	Ferry Improvements,	3½		40,000 00
	"	1.	Sewerage Loan,	3½		50,000 00
1934.	June	1.	Separate Systems of Drainage,	3½		3,000 00
1935.	Dec.	1.	Separate Systems of Drainage,	3½		65,000 00
1937.	July	1.	Northern Avenue and Sleeper Street,	4		111,000 00
	"	1.	Separate Systems of Drainage,	4		52,000 00
1946.	June	1.	Boston Tunnel and Subway,	3½		15,000 00
1947.	April	1.	Boston Tunnel and Subway,	4		28,000 00
Investments,						\$575,000 00
Cash,						84,297 49
Total Resources,						<u>\$659,297 49</u>

SEWERAGE LOAN DEBT AND SINKING FUND, No. 1.

SEWERAGE LOAN SINKING FUND DEBT, No. 1.

"Sewerage Loan Debt," issued under chapter 426, Acts of 1897, chapter 257, Acts of 1898, and chapter 450, Acts of 1899, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Sewerage Loan Sinking Fund, No. 1." The dates show when the debt becomes due.

1928.	Jan.	1.	Sewerage Loan,	3½		\$500,000 00
1928.	July	1.	Sewerage Loan,	3½		500,000 00
1929.	July	1.	Sewerage Loan,	3½	\$1,000,000 00	
1930.	Jan.	1.	Sewerage Loan,	3½	100,000 00	
Total, Financial Year, 1929-30,						1,100,000 00
1930.	April	1.	Sewerage Loan,	3½	\$109,000 00	
	July	1.	Sewerage Loan,	3½	791,000 00	
Total, Financial Year, 1930-31,						900,000 00
1932.	June	1.	Sewerage Loan,	3½		1,000,000 00
1933.	June	1.	Sewerage Loan,	3½		1,000,000 00
1935.	July	1.	Sewerage Loan,	3½	\$800,000 00	
	Dec.	1.	Sewerage Loan,	3½	200,000 00	
Total, Financial Year, 1935-36,						1,000,000 00
1936.	July	1.	Sewerage Loan,	4		749,000 00
1937.	April	1.	Sewerage Loan,	4	\$200,650 00	
	July	1.	Sewerage Loan,	4	495,000 00	
	Oct.	1.	Sewerage Loan,	4	4,350 00	
Total, Financial Year, 1937-38,						700,000 00
1944.	June	1.	Sewerage Loan,	3½		1,000,000 00
Total Debt,						<u>\$8,449,000 00</u>

SEWERAGE LOAN SINKING FUND, No. 1.

Resources of the "Sewerage Loan Sinking Fund, No. 1," being Bonds and Cash. The dates show when the Bonds become due.

1917.	Oct.	1.	Stony Brook Improvement,	4		\$20,000 00
1918.	April	1.	New Ferry Landing,	3½		25,000 00
	July	1.	New Buildings, City Hospital,	3½		4,000 00
	"	1.	Street Improvements, June 30, 1898,	3½		41,480 00
1919.	July	1.	Improved Sewerage,	3½		46,000 00
1921.	Jan.	1.	Various Municipal Purposes, January 5,			
			1901,	3		80,000 00
	July	1.	Street Improvements,	4		2,000 00
	"	1.	Various Municipal Purposes, January 5,			
			1901,	3½		150,000 00
	Oct.	1.	Strandway, Purchase of Land, etc.,	3		50,000 00
1922.	July	1.	Street Improvements,	4		243,000 00
1925.	Jan.	2.	Public Parks,	4		200,000 00
	Dec.	1.	Various Municipal Purposes,	3½		3,000 00
1928.	Jan.	1.	Sewerage Loan,	3½		16,000 00
	July	1.	Sewerage Loan,	3½		284,000 00
	Oct.	1.	Sewerage Loan,	3½		2,000 00
1930.	Jan.	1.	Chapel, Mt. Hope Cemetery,	3½		100,000 00
	April	1.	Sewerage Loan,	3½		58,000 00

Carried forward,

\$1,324,480 00

SINKING FUNDS DEPARTMENT.

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			<i>Brought forward,</i>		\$1,324,480 00
1930.	July	1.	Sewerage Loan,	3½	28,000 00
	Oct.	1.	Schoolhouses,	3	100,000 00
1931.	Jan.	1.	Normal School Building and Land,	3	5,000 00
	April	1.	Laying Out and Construction of Highways,	3	75,000 00
	July	1.	Laying Out and Construction of Highways,	3½	90,000 00
		1.	Schoolhouses,	3½	54,000 00
1932.	June	1.	Broadway Bridge, Rebuilding,	3½	88,000 00
	"	1.	Ferry Improvements,	3½	1,000 00
	"	1.	Sewerage Loan,	3½	70,000 00
	Dec. 31.		Highways, Making of,	3½	25,000 00
1933.	June	1.	Sewerage Loan,	3½	64,000 00
1934.	Jan.	1.	Highways, Making of,	3½	26,000 00
1935.	July	1.	Schoolhouses,	4	235,000 00
	"	1.	Sewerage Loan,	3½	16,000 00
	Dec.	1.	Separate Systems of Drainage,	3½	1,000 00
1936.	July	1.	Sewerage Loan,	4	19,000 00
1937.	April	1.	Sewerage Loan,	4	200,000 00
	July	1.	Sewerage Loan,	4	71,000 00
	"	1.	Separate Systems of Drainage,	4	158,000 00
1938.	Jan.	1.	Rapid Transit,	3½	1,000 00
1939.	July	1.	Stony Brook Improvement,	3½	12,000 00
1941.	Oct.	1.	Rapid Transit, East Boston Tunnel,	3	25,000 00
1943.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3½	275,000 00
	June	1.	Rapid Transit, East Boston Tunnel,	3½	4,000 00
1944.	Jan.	1.	Boston Tunnel and Subway,	3½	50,000 00
	June	1.	Sewerage Loan,	3½	100,000 00
1946.	June	1.	Boston Tunnel and Subway,	3½	85,000 00
			Investments,		\$3,202,480 00
			Cash,		187,298 41
			Total Resources,		<u>\$3,389,778 41</u>

STONY BROOK IMPROVEMENT, SPECIAL DEBT AND SINKING FUND.

STONY BROOK IMPROVEMENT, SPECIAL SINKING FUND DEBT.

"Stony Brook Improvement Debt" of the City of Boston, issued under chapter 428, Acts of 1887, chapter 530, Acts of 1896, and chapter 397, Acts of 1899, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Stony Brook Improvement, Special Sinking Fund." The dates show when the debt becomes due.

1917.	Oct.	1.	Stony Brook Improvement (chapter 428, Acts 1887),	4	\$500,000 00
1937.	July	1.	Stony Brook Improvement (chapter 530, Acts 1896),	3½	\$84,000 00
1938.	Jan.	1.	Stony Brook Improvement (chapter 530, Acts 1896),	3½	100,000 00
					<u>184,000 00</u>
1939.	July	1.	Stony Brook Improvement (chapter 397, Acts 1899),	3½	350,000 00
			Total Debt,		<u>\$1,034,000 00</u>

STONY BROOK IMPROVEMENT, SPECIAL SINKING FUND.

Resources of the "Stony Brook Improvement, Special Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1917.	Oct.	1.	Stony Brook Improvement Scrip,	4	\$77,000 00
1918.	Oct.	1.	Evergreen Cemetery, Wall,	3½	1,500 00
	"		Various Municipal Purposes, September 30, 1898,	3½	16,500 00
	"	1.	Washington Street, between Grove Hall and Columbia Road,	3½	4,500 00
1929.	July	1.	Playgrounds,	3½	25,000 00
1930.	April	1.	Sewerage Loan	3½	42,000 00
1931.	April	1.	Laying Out and Construction of Highways,	3	30,000 00
1932.	Dec. 31.		Highways, Making of,	3½	117,900 00
1934.	Jan.	1.	Broadway Bridge, Rebuilding,	3½	60,000 00
1936.	June	1.	Playground, Wards 7 and 9,	3½	22,000 00
1937.	July	1.	Stony Brook Improvement,	3½	31,000 00
1938.	July	1.	Blue Hill and Other Avenues,	3½	13,000 00
1939.	July	1.	Stony Brook Improvement,	3½	10,000 00
			Carried forward,		<u>\$450,400 00</u>

<i>Brought forward,</i>					\$450,400 00
1945.	April	1.	Boston Tunnel and Subway,	3½	26,500 00
1947.	April	1.	Boston Tunnel and Subway,	4	23,000 00
Investments,					\$499,900 00
Cash,					30,043 68
Total Resources,					\$529,943 68

THIRTY-YEAR DEBT AND SINKING FUND, No. 2.

THIRTY-YEAR SINKING FUND DEBT, No. 2.

"Thirty-Year Debt, No. 2," of the City of Boston, issued under chapters 370 and 381, Acts of 1903, and chapter 391, Acts of 1904, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Thirty-Year Sinking Fund, No. 2." The dates show when the debt becomes due.

1934.	Jan.	1.	Dorchester Street,	3½	\$375,000 00
	"	1.	Hyde Park Avenue,	3½	225,000 00
	"	1.	Brandon Street and Belgrade Avenue,	3½	100,000 00
1935.	Jan.	1.	Northern Avenue and Sleeper Street,	3½	10,000 00
1936.	July	1.	Northern Avenue and Sleeper Street,	4	100,000 00
1937.	Jan.	1.	Brookline Street Bridge,	3½	48,000 00
	July	1.	Northern Avenue and Sleeper Street,	4	300,000 00
	Dec.	1.	Brookline Street Bridge,	4	9,000 00
1938.	June	1.	Northern Avenue and Sleeper Street,	4	100,000 00
1939.	April	1.	Northern Avenue and Sleeper Street,	3½	50,000 00
<i>Total Debt,</i>					<u>\$1,317,000 00</u>

THIRTY-YEAR SINKING FUND, No. 2.

Resources of the "Thirty-Year Sinking Fund, No. 2," being Bonds and Cash. The dates show when the Bonds become due.

1919.	July	1.	Improved Sewerage,	3½	\$43,000 00
1922.	June	1.	Various Municipal Purposes,	3½	2,000 00
1932.	June	1.	Laying Out and Construction of Highways,	3½	30,000 00
	"	1.	Sewerage Loan,	3½	50,000 00
1936.	June	1.	Playground, Wards 7 and 9,	3½	15,000 00
	July	1.	Sewerage Loan,	4	20,000 00
1937.	Jan.	1.	Brookline Street Bridge,	3½	18,000 00
	July	1.	Northern Avenue and Sleeper Street,	4	14,000 00
	Dec.	1.	Brookline Street Bridge,	4	9,000 00
<i>Investments,</i>					\$201,000 00
<i>Cash,</i>					90,618 21
<i>Total Resources,</i>					<u>\$291,618 21</u>

COCHITUATE WATER DEBT AND SINKING FUND.

COCHITUATE WATER SINKING FUND DEBT.

"Cochituate Water Debt" of the City of Boston, to be paid as it becomes due from the "Cochituate Water Sinking Fund." The dates show when the debt becomes due.

1914.	April	1.	Additional Supply of Water,	4	\$3,000 00
	Oct.	1.	Additional Supply of Water,	4	2,000 00
<i>Total, Financial Year, 1914-15,</i>					<u>\$5,000 00</u>
1915.	April	1.	High Service,	4	\$13,500 00
	Oct.	1.	High Service,	4	8,000 00
1916.	Jan.	1.	High Service,	4	8,000 00
<i>Total, Financial Year, 1915-16,</i>					<u>29,500 00</u>
1916.	April	1.	High Service,	4	\$3,500 00
	Oct.	1.	High Service,	4	2,000 00
1917.	Jan.	1.	High Service,	4	8,000 00
<i>Total, Financial Year, 1916-17,</i>					<u>13,500 00</u>
<i>Carried forward,</i>					<u>\$48,000 00</u>

SINKING FUNDS DEPARTMENT.

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<i>Brought forward,</i>						\$48,000 00
1917.	April	1.	Extension of Mains, etc.,	3½	\$148,000 00	
"	"	1.	Additional Supply of Water,	3½	35,000 00	
"	"	1.	Protection of Water Supply,	3½	50,000 00	
"	"	1.	Improvement of Lake Cochituate,	3½	40,000 00	
Oct.	"	1.	High Service,	4	1,700 00	
"	"	1.	Extension of Mains, Cochituate Water-works,	4	87,000 00	
1918.	Jan.	1.	High Service,	4	8,000 00	
Total, Financial Year, 1917-18,						369,700 00
1918.	July	1.	Extension of Mains, etc.,	3½	\$100,000 00	
Oct.	"	1.	Extension of Mains, etc.,	4	95,000 00	
Total, Financial Year, 1918-19,						195,000 00
1919.	April	1.	Extension of Mains, etc.,	4	\$160,000 00	
Oct.	"	1.	Additional Supply of Water,	3½	2,000 00	
"	"	1.	Additional Supply of Water,	4	105,000 00	
Nov.	15.	1.	Extension of Mains, etc.,	3½	1,400 00	
"	30.	1.	Extension of Mains, etc.,	3½	81,000 00	
1920.	Jan.	1.	Extension of Mains, etc.,	3½	10,000 00	
"	"	1.	High Service,	3½	50,000 00	
"	"	6.	Extension of Mains, etc.,	3½	8,000 00	
Total, Financial Year, 1919-20,						417,400 00
1920.	Oct.	1.	Additional Supply of Water,	4	\$33,000 00	
"	"	1.	Extension of Mains, etc.,	4	58,000 00	
Total, Financial Year, 1920-21,						91,000 00
1921.	Oct.	1.	Additional Supply of Water,	4	\$136,000 00	
1922.	Jan.	1.	Extension of Mains, etc.,	4	21,000 00	
Total, Financial Year, 1921-22,						157,000 00
1922.	April	1.	High Service,	4	\$75,000 00	
Oct.	"	1.	Additional Supply of Water,	4	187,000 00	
Total, Financial Year, 1922-23,						262,000 00
1923.	Oct.	1.	Additional Supply of Water,	4	5,350 00	
1924.	Oct.	1.	Additional Supply of Water,	4	420,000 00	
1929.	July	1.	Extension of Mains,	3½	87,000 00	
Total Debt,						<u>\$2,052,450 00</u>

COCHITUATE WATER SINKING FUND.

Resources of the "Cochituate Water Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1928.	Oct.	1.	Schoolhouses,	3½	\$400,000 00
1931.	July	1.	Various Municipal Purposes, July 3, 1901,	3½	1,100,000 00
1935.	Oct.	1.	Suffolk County Courthouse, \$13,260, payable October 1, annually, to and including October 1, 1935,	3	291,720 00
Investments,					\$1,791,720 00
Cash,					162,543 42
Total Resources,					<u>\$1,954,263 42</u>

MONEYS FOR REDUCTION OF DEBT.

Being Cash received for Rents, Sales of Land, etc.

INVESTMENTS.

1924.	Jan.	1.	Various Municipal Purposes, January 2, 1904,	3½	\$100,000 00
Cash,					43,600 94
Total Resources					<u>\$143,600 94</u>

SINKING FUND DEBT OF THE COUNTY OF SUFFOLK,

Issued OUTSIDE THE DEBT LIMIT fixed by Section 3 of
Chapter 27 of the Revised Laws.

SUFFOLK COUNTY COURTHOUSE DEBT AND SINKING FUND.

SUFFOLK COUNTY COURTHOUSE SINKING FUND DEBT.

"Suffolk County Courthouse Debt," issued under chapter 101 of the Acts of 1887, and chapter 288, Acts of 1892, of the Legislature of Massachusetts, to be paid as it becomes due from the resources of the "Suffolk County Courthouse Sinking Fund." The dates show when the debt becomes due.

1918.	Oct.	1.	Suffolk County Courthouse,	4	\$700,000 00	
			Total, Financial Year, 1918-19,			\$700,000 00
1919.	Oct.	1.	Suffolk County Courthouse,	3½	\$800,000 00	
			Total, Financial Year, 1919-20,			800,000 00
1922.	July	1.	Suffolk County Courthouse,	4	\$306,000 00	
	"	1.	Suffolk County Courthouse, Furnishing,	4	100,000 00	
			Total, Financial Year, 1922-23,			406,000 00
1923.	Oct.	1.	Suffolk County Courthouse, Furnishing,	4	\$75,000 00	
			Total, Financial Year, 1923-24,			75,000 00
1924.	July	1.	Suffolk County Courthouse,	4	\$40,000 00	
			Total, Financial Year, 1924-25,			40,000 00
1937.	April	1.	Suffolk County Courthouse,	3½	\$800,000 00	
			Total, Financial Year, 1937-38,			800,000 00
1938.	July	1.	Suffolk County Courthouse,	3½	\$100,000 00	
			Total, Financial Year, 1938-39,			100,000 00
			Total Debt,			<u>\$2,921,000 00</u>

SUFFOLK COUNTY COURTHOUSE SINKING FUND.

Resources of the "Suffolk County Courthouse Sinking Fund," being Bonds and Cash. The dates show when the Bonds become due.

1914.	July	1.	Improved Sewerage,	4	\$50,000 00
	Oct.	1.	Crushed Stone for Street Improvements,	4	50,000 00
1917.	Oct.	1.	Stony Brook Improvement,	4	50,000 00
1918.	July	1.	New Building, City Hospital,	3½	6,000 00
	Oct.	1.	Suffolk County Courthouse,	4	63,000 00
1919.	July	1.	Chelsea Bridge, Widening Draw, etc.,	3½	30,000 00
	Oct.	1.	Suffolk County Courthouse,	3½	97,000 00
	Dec.	1.	Various Municipal Purposes, October 30, 1899,	3½	42,000 00
1921.	Jan.	1.	Various Municipal Purposes, January 5, 1901,	3	60,000 00
	July	1.	Hospital Buildings, Improvements,	3½	18,000 00
	"	1.	Wardroom and Gymnasium, Ward 8,	3½	7,000 00
1922.	July	1.	Suffolk County Courthouse, Furnishing,	4	168,000 00
			Carried forward,		<u>\$641,000 00</u>

SINKING FUNDS DEPARTMENT.

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<i>Brought forward,</i>					\$641,000 00
1923.	Oct.	1.	Suffolk County Courthouse, Furnishing,	4	75,000 00
1924.	July	1.	Suffolk County Courthouse,	4	40,000 00
1926.	June	1.	Franklin Union, Site,	3½	16,000 00
1928.	Jan.	1.	Schoolhouses,	3½	2,000 00
	"	1.	Sewerage Loan,	3½	110,000 00
1928.	Oct.	1.	Public Parks,	3½	17,000 00
1930.	Oct.	1.	Schoolhouses,	3	55,000 00
1931.	April	1.	Laying Out and Construction of Highways,	3	10,000 00
1932.	Jan.	1.	Laying Out and Construction of Highways,	3	83,000 00
	June	1.	Laying Out and Construction of Highways,	3½	2,000 00
	"	1.	Chestnut Hill Park,	3½	5,000 00
	Dec.	31.	Highways, Making of,	3½	4,500 00
1934.	Jan.	1.	Dorchester Street,	3½	175,000 00
	"	1.	Highways, Making of,	3½	30,000 00
1935.	Oct.	1.	Charlestown Bridge,	4	10,000 00
	Dec.	1.	Highways, Making of,	3½	2,000 00
1937.	Jan.	1.	Blue Hill and Other Avenues,	3½	20,000 00
	"	1.	Brookline Street Bridge,	3½	30,000 00
1937.	July	1.	Stony Brook Improvement,	3½	21,000 00
	"	1.	Sewerage Loan,	4	15,000 00
1938.	Jan.	1.	Stony Brook Improvement,	3½	44,000 00
1943.	Jan.	1.	Rapid Transit, East Boston Tunnel,	3½	25,000 00
1947.	April	1.	Boston Tunnel and Subway,	4	30,000 00
	Dec.	1.	Cambridge Bridge,	4	30,000 00
					<u>\$1,492,500 00</u>

SERIAL BONDS.

Due Oct. 1, 1914-22, \$3,000 annually.	Consumptives' Hospital Department, Children's Hospital,	4	\$27,000 00	
Due " 1, 1923-32, \$2,000 annually.	Consumptives' Hospital Department, Children's Hospital,	4	20,000 00	
				<u>47,000 00</u>
Investments,				\$1,539,500 00
Cash,				108,828 90
Total Resources,				<u>\$1,648,328 90</u>

Total Sinking Fund Debt:	
City of Boston,	\$103,732,331 00
County of Suffolk,	2,921,000 00
	<u>\$106,653,331 00</u>
In addition to above there are Serial Loans outstanding amounting to	<u>\$13,872,250 01</u>

BOARD OF COMMISSIONERS OF SINKING FUNDS,
JANUARY 31, 1914.

JAMES W. DUNPHY, *Chairman.*
WILLIAM G. CADIGAN.
JOHN W. O'MEALEY.
W. PRENTISS PARKER.
JAMES T. WETHERALD.
MAX E. WYZANSKI.

J. ALFRED MITCHELL, *Secretary.*
CHARLES H. SLATTERY, *Treasurer.*



ANNUAL REPORT
OF THE
SOLDIERS' RELIEF DEPARTMENT

FOR THE
YEAR ENDING JANUARY 31, 1914.

BOSTON, March 2, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— In accordance with the requirements of chapter 3, section 24, of the Revised Ordinances, I have the honor to submit herewith the annual report of the Soldiers' Relief Department for the year ending January 31, 1914.

DUTIES.

The duties of this department are the reception, investigation and disposition of applications for state and military aid and burials under chapter 468, Acts of 1909, and for soldiers' relief under chapter 79, section 18, Revised Laws, as amended by chapter 323, Acts of 1913.

These duties involve more care and responsibility as the years go by because of the increasing age of the

veterans and their consequent inability to provide for themselves and their dependent wives. Added to this is the now universally acknowledged problem of the increased cost of living, necessitating in most cases a more liberal allowance of soldiers' relief than was the rule when subsistence was less costly. Every application is carefully investigated before it is decided, in order that justice may be done to the state and city as well as to the applicant.

The power to grant state aid and military aid is entirely in the hands of the State Aid Commissioner, who is appointed by the Governor and who has an office in the State House. Recommendation for such aid is made by the Soldiers' Relief Commissioner. All of the state aid and one-half of the military aid disbursed by the city is reimbursed by the state on the 1st of December following the year in which the aid was paid out.

Only soldiers of the Civil, Spanish and Philippine Wars who have acquired legal settlements in the state since May 1, 1860, and the dependents of such soldiers are entitled to soldiers' relief, and only by the city or town in which the latest legal settlement has been acquired. All allowances for such relief in Boston are made by the Soldiers' Relief Committee of the City Council upon the recommendation of the Soldiers' Relief Commissioner, after consideration of each case at the regular monthly meeting of the committee. The state makes no reimbursement to the city for disbursements under the head of soldiers' relief.

In many cases applicants for soldiers' relief are found to have legal settlements in other cities and towns in the state and therefore not entitled to such relief from Boston. Advice as to the proper steps to take is given in such cases and every possible assistance rendered in the way of securing and forwarding the necessary evidence.

In cases where applicants are unable to call at this office through sickness or other disability, they are waited upon at their homes by the agents of the department, where statements as to their conditions and needs are taken under oath and their signatures secured to all necessary papers.

The number of applicants for all kinds of relief during the year and the dispositions thereof are shown in the following table:

	Soldiers.	Wives.	Widows.	Children.	Mothers.	Fathers.	Army Nurses.	Total.	Total Preceding Year.
Applications.....	590	19	485	33	10	2	1	1,140	995
Accepted.....	375	10	316	30	6	1	1	739	592
Rejected.....	215	9	169	3	4	1	.....	401	403
Totals.....	590	19	485	33	10	2	1	1,140	995

VISITATIONS.

There have been 2,133 visits made to beneficiaries during the year with the result that 26 cases have been dropped from the pay roll and 9 reductions made. In addition to the above there were 258 visits made for information, 59 visits made for the purpose of filling out blanks and making affidavits, and 37 to convey aid and relief to infirm beneficiaries.

STATE AID.

Chapter 468, Section 3, Acts of 1909.

Only soldiers and sailors who served to the credit of Massachusetts during the War of the Rebellion and the War with Spain, and, under certain conditions, their wives and widows, are entitled to state aid. The first state aid law was passed May 23, 1861, being chapter 222 of the Acts of the Legislature of that year, and it has been re-enacted every five years since. It is limited to \$6 per month for men and \$4 per month for women.

The payments and changes during the year are shown in the following tables:

State Aid.

Civil War Cases.

CHAPTER 468, SECTION 3, ACTS OF 1909.	Soldiers.	Wives.	Widows.	Mothers.	Army Nurses.	Total.	Total Preceding Year.
Number on roll January 31, 1913.....	439	25	972	6	1	1,443	1,541
Added during the year.....	64	1	68	.....	.....	133	178
Dropped during the year.....	101	2	114	.....	.....	217	276
Number on roll January 31, 1914.....	402	24	926	6	1	1,359	1,443

Whole number aided during the year, 1,576.

Whole number aided during the preceding year, 1,719.

Amount disbursed, \$79,007.

State Aid.

Spanish War Cases.

CHAPTER 468, SECTION 3, ACTS OF 1909.	Soldiers.	Widows.	Children.	Mothers.	Fathers.	Total.	Total Preced- ing Year.
Number on roll January 31, 1913.....	6	5	.....	8	2	21	20
Added during the year.....	5	.....	.....	.....	.....	5	6
Dropped during the year.....	3	.....	.....	1	1	5	5
Number on roll January 31, 1914.....	8	5	.....	7	1	21	21

Whole number aided during the year, 26.

Whole number aided during the preceding year, 26.

Amount disbursed, \$1,028.

Consolidated Table of Civil War and Spanish War Cases.

CHAPTER 468, SECTION 3, ACTS OF 1909.	Soldiers.	Wives.	Widows.	Mothers.	Army Nurses.	Fathers.	Children.	Total.	Total Preced- ing Year.
Number on roll January 31, 1913..	445	25	977	14	1	2	.....	1,464	1,561
Added during the year.....	69	1	68	.....	.....	.....	.....	138	184
Dropped during the year.....	104	2	114	1	.....	1	.....	222	281
Number on roll January 31, 1914..	410	24	931	13	1	1	.....	1,380	1,464

Whole number aided during the year, 1,602.

Whole number aided during the preceding year, 1,745.

Amount disbursed, \$80,035.

MILITARY AID.

Chapter 468, Section 9, Acts of 1909.

This aid is payable only to those who served to the credit of Massachusetts in the War of the Rebellion and the War with Spain, and is unlimited. It is allowed usually in emergency cases where, on account of sickness or other causes, the living expenses exceed the income derived from pension and state aid.

Payments and changes under this law appear in the following table:

Military Aid.

CHAPTER 468, SECTION 9, ACTS OF 1909.	Civil War.	Spanish War.	Total.	Total Preceding Year.
Number on roll January 31, 1913.....	28	15	43	56
Added during the year.....	19	19	19	17
Dropped during the year.....	6	20	26	30
Number on roll January 31, 1914.....	22	14	36	43
Whole number aided during the year:				
Civil War	28 cases, costing			\$3,761 00
Spanish War	34 " "			4,118 00
Total	62 " "			<u>\$7,879 00</u>
Whole number aided preceding year:				
Civil War	37 cases, costing			\$4,691 00
Spanish War	36 " "			3,943 00
Total	73 " "			<u>\$8,634 00</u>

SOLDIERS' RELIEF.

Chapter 79, Section 18, Revised Laws, and Chapter 323, Acts of 1913.

The first soldiers' relief law was enacted in 1888 for the purpose of removing soldiers of the Civil War and their dependents from the almshouses throughout the state, where they were being supported as paupers, and adding to their restricted pension and state aid sufficient to support them in their own homes.

The law was amended by the Legislature of 1913 by including in its benefits soldiers who served during the Spanish and Philippine Wars and their dependents.

Soldiers' relief is unlimited and is granted only to those having legal settlements in Boston as the entire expense falls on the city.

The following tables show the payments made under this law.

Soldiers' Relief.

Civil War Cases.

CHAPTER 79, SECTION 18, REVISED LAWS.	Soldiers.	Wives.	Widows.	Mothers.	Children.	Army Nurses.	Total.	Total Preceding Year.
Number on roll January 31, 1913.....	177	52	739	5	3	1	977	1,005
Added during the year.....	14	6	48	.....	1	.....	69	87
Dropped during the year.....	36	5	76	.....	.....	.....	117	115
Number on roll January 31, 1914.....	155	53	711	5	4	1	929	977

Whole number aided during the year, 1,046.

Whole number aided during the preceding year, 1,092.

Amount disbursed, \$90,110.79.

Soldiers' Relief.

Spanish and Philippine War Cases.

CHAPTER 323, ACTS OF 1913. AMENDMENT TO CHAPTER 79, SECTION 18, REVISED LAWS.	Soldiers.	Wives.	Widows.	Mothers.	Fathers.	Children.	Total.	Total Preced- ing Year.
Number on roll January 31, 1914.	9	2	9	7	1	29	57	.....

Whole number aided during the year, 57.

Amount disbursed, \$2,423.

Consolidated Table of Civil, Spanish and Philippine War Cases.

CHAPTER 79, SECTION 18, REVISED LAWS, AND CHAPTER 323, ACTS OF 1913.	Soldiers.	Wives.	Widows.	Mothers.	Children.	Fathers.	Army Nurses.	Total.	Total Preced- ing Year.
Number on roll January 31, 1913,	177	52	739	5	3	.....	1	977	1,005
Added during the year.	23	8	57	7	30	1	.....	126	87
Dropped during the year.	36	5	76	.....	.....	.....	.....	117	115
Number on roll January 31, 1914,	164	55	720	12	33	1	1	986	977

Whole number aided during the year, 1,103.

Whole number aided during the preceding year, 1,092.

Amount disbursed, \$92,533.79.

SEPARATE PERSONS AIDED.

The foregoing tables contain many duplications by reason of the same person drawing under two different laws.

The actual number of separate persons relieved, together with all changes during the year, will be found in the following table:

Separate Persons.

ACTUAL NUMBER OF INDIVIDUAL PERSONS RELIEVED BY THE DEPARTMENT DURING THE YEAR 1913.	Soldiers.	Wives.	Widows.	Fathers.	Mothers.	Children.	Army Nurses.	Total.
Number on roll January 31, 1913. . .	602	68	1,270	2	14	3	1	1,960
Added during the year.	96	8	99	1	7	30	.....	241
Dropped during the year.	149	12	125	1	3	.....	.....	290
Number on roll January 31, 1914. . .	549	64	1,244	2	18	33	1	1,911

Whole number of individual persons aided during the year, 2,201.

Whole number of individual persons aided during the preceding year, 2,240.

BURIALS.

Chapter 468, Section 17, Acts of 1909, and Chapter 475, Acts of 1913.

Up to April 10, 1913, the state allowed \$35 for the burial of a soldier whose estate was insufficient for the payment of his funeral expenses. Since then, by the enactment of chapter 475, Acts of 1913, the allowance by the state has been increased to \$48.

Capt. Charles A. Feyhl, of 37 Tremont street, has for many years been burial agent for this department and has faithfully attended to the duties thereof.

The number and expense of burials during the past year are shown in the following table:

Burials.

CHAPTER 468, SECTION 17, ACTS OF 1909.	Soldiers.	Widows.	Wives.	Mothers.	Expense Burial Agent.	Total.
Number.....	66	23	2	1	.....	92
Expense.....	\$2,620 00	\$1,199 00	\$96 00	\$35 00	\$184 00	\$4,134 00

DEATHS.

The following table shows the deaths that have occurred among the beneficiaries of this department during the past year:

Deaths.

Soldiers.	Wives.	Widows.	Mothers.	Fathers.	Children.	Army Nurses.	Total.	Total Preceding Year.
45	1	67	.....	1	.....	.....	114	143

LOCATION OF BENEFICIARIES.

Under the law, soldiers and their dependents, residing within the state, having legal settlements in Boston, are entitled to receive soldiers' relief from this department, as are also inmates of certain public institutions.

The locations of such beneficiaries are shown in the table on page 8.

Location of Beneficiaries.

	Soldiers.	Wives.	Widows.	Mothers.	Fathers.	Children.	Army Nurses.	Total.
Beneficiaries residing in Boston.....	523	53	1,161	17	2	29	....	1,785
Beneficiaries residing outside of Boston...	21	11	74	1	....	4	1	112
Beneficiaries supported in institutions....	5	....	9	....	....	....	....	14
Totals.....	549	64	1,244	18	2	33	1	1,911

SOLDIERS' HOMES.

Every soldier who can be induced to enter a soldiers' home benefits not only himself but the place of his residence, by relieving it of the expense of his support. For this double reason soldiers who have no family ties are advised to avail themselves of the benefits to be derived by becoming inmates of such homes. Our efforts in that direction resulted in the sending of ninety-two veterans to the National Soldiers' Home in Togus, Maine, and ten veterans to the Soldiers' Home in Chelsea, the latter being taken by ambulance kindly furnished by the Superintendent of Public Buildings.

EMERGENCY FUND.

The City Council very wisely decided to provide this department with a limited fund from which small sums are given to applicants in temporary need, and transportation furnished to soldiers' homes and other places. The real value of this fund lies in the fact that, were it not available, many of the applicants would have to be entered on the department pay roll, and once on it would be difficult to get them off.

Temporary assistance was rendered to fifty-nine Civil and Spanish War veterans and twenty-three widows of veterans, and ninety-two veterans were furnished with transportation to the Soldiers' Home in Togus, Maine.

ACKNOWLEDGMENTS.

The members of the Soldiers' Relief Committee during the past year were Councilors McDonald, Buckley, Watson, Smith and Coulthurst. The never-failing kindness and humanity displayed by them to the appli-

cants for relief is most commendable, and their courtesy to the Soldiers' Relief Commissioner and his officials is very deeply appreciated.

The department is also under lasting obligations to Mr. Manus J. Fish, Superintendent of Public Buildings, for his always ready response to requests for the use of his department ambulance.

FINANCIAL STATEMENT.

Regular appropriation	\$200,000 00
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Expenses.

Chapter 468, section 3, to 1,602 persons	\$80,035 00
Chapter 468, section 9, to 62 persons	7,879 00
Chapter 468, section 17, to 92 persons	4,134 00
Chapter 79, section 18, Revised Laws, and chapter 323, Acts of 1913, to 1,103 persons	92,533 79
	<u>\$184,581 79</u>

Salaries.

John E. Gilman, commissioner	\$3,500 00
Clerks	12,191 68
	<u>15,691 68</u>

Office Expenses.

Printing	\$306 75
Stationery and postage	151 27
Premium on surety bonds	80 00
Traveling	153 35
Telephone	131 02
Temporary relief fund, special draft	200 00
	<u>1,022 39</u>

Total expenses	<u>\$201,295 86</u>
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There was received from the Commonwealth of Massachusetts as follows:

Chapter 468, section 3, Acts of 1909	\$85,459 00
Chapter 468, section 9, Acts of 1909	5,101 00
Chapter 468, section 17, Acts of 1909	4,514 00
	<u>\$95,074 00</u>

Total expenses	\$201,295 86
Total receipts	95,074 00

Net cost to city	<u>\$106,221 86</u>
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Very respectfully,

J. E. GILMAN,
Soldiers' Relief Commissioner.





ANNUAL REPORT
OF THE
STATISTICS DEPARTMENT
FOR THE YEAR 1913-14.

BOSTON, March 1, 1914.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,—The undersigned, the Trustees of the Statistics Department, have the honor to submit the following report of the work of the department for the year ending January 31, 1914.

Mr. F. Spencer Baldwin was reappointed as a trustee of the department and confirmed by the State Civil Service Commission in March, 1913.

Mr. William D. C. Curtis was reappointed as a trustee in January, 1914, and confirmed by the Civil Service Commission in the same month.

Three new appointments to the Board were also made in January, 1914, and confirmed by the Civil Service Commission in the same month, viz., Mr. John D. Worcester, Mr. Frederick W. Rugg and Mr. William D. McKissick.

Our office force now consists of a secretary, an editorial clerk, a statistical clerk and a stenographer.

SPECIAL PUBLICATIONS, No. 20.

Receipts and Expenditures of Ordinary Revenue, 1908-12.

This number is the seventeenth of our annual Special Publications, entitled "*Receipts and Expenditures of*

Ordinary Revenue," (three earlier numbers of the twenty having been devoted to Extraordinary Receipts and Expenditures) and it covers the five-year period 1908-12. It contains a complete comparative analysis of this class of the City's financial transactions, showing in detail how the annual appropriation for each municipal department was expended in each year of the period, the items arranged side by side. Besides these itemized expenditures there is shown, for all departments that receive revenue, the amount of same credited to the appropriation or turned into the general fund of the City Treasury, also the surplus or deficit of each department's appropriation at the close of the fiscal year. There is, in addition, "Appendix A," consisting of notes on sales of City Property, and "Appendix B," consisting of twenty-five pages, in which the other three classes of the City's accounts are shown, viz., *extraordinary, trust funds and bookkeeping items*, all of which are grouped with the *ordinary* in tables covering the same five-year period, the Suffolk County accounts being separated from those of Boston. Besides these single-page tables showing "*Analysis of Receipts by Sources of Income*" and "*Summary of Receipts and Expenditures*" for each year, there is a ten-page table in which the three main classes of accounts for the fiscal year 1912-13 are analyzed according to the "Uniform System" of the National Municipal League. This table is an example of what an improved system of municipal accounting should show.

The actual receipts of the City (viz., the total of ordinary and extraordinary receipts) in the fiscal year 1912-13 amounted to \$38,561,059, an increase of \$2,016,186 over the previous year's total. Most of this increase is due to the excess in amount of loans over the previous year's total, viz., \$1,248,500.

The actual expenditures (ordinary and extraordinary for 1912-13) amounted to \$39,336,607, or \$4,633,003 more than in the year preceding.

In the ten-year period 1902-11 the actual receipts of the City (ordinary and extraordinary) ranged between \$31,732,215 (the lowest total) in 1903-04 and \$36,677,107 (the highest total) in 1910-11, showing a yearly average of \$34,192,358, or \$4,368,701 less than the amount of such receipts in the fiscal year 1912-13.

In the comparison of the actual expenditures (ordinary and extraordinary) it appears that the total for 1912-13 (*i. e.*, \$39,336,607) exceeded the yearly average for the preceding decade by \$5,564,691, and the average for the preceding five years by \$5,270,797.

Taking the ordinary receipts alone (*i. e.*, exclusive of loans, etc.), the total of these was \$32,564,342 in 1912-13, against \$31,823,719 in the year 1911-12, an increase of \$740,623.

In the ten-year period 1902-11, ordinary receipts alone ranged between \$23,574,428 in 1902 (the lowest total) and \$31,823,719 in 1911 (the highest total), showing an average for the decade of \$27,463,901, and for the last five years of \$29,614,309.

Taking ordinary expenditures alone, these ranged between \$22,929,897 in 1902 (the lowest total) and \$30,615,716 in 1911 (the highest total), their average for the ten-year period being \$26,979,294 and for the last five years of the decade \$29,131,165.

The three principal objects of expenditure, to the payment of which the ordinary receipts are applied, appear in the following summary:

Ten Years, 1902-11.

	TOTAL EXPENDITURE.	AVERAGE ANNUAL EXPENDITURE.
Debt requirements.....	\$45,258,871	\$4,525,887
Schools.....	39,374,534	3,937,453
Street Department *.....	35,630,972	3,563,097
Totals.....	\$120,264,377	\$12,026,437

The total expenditure for the three specified objects in the ten years, viz., \$120,264,377, was 44.6 per cent. of the aggregate ordinary expenditures for that period.

Comparing the average annual expenditure for the same three objects in the decade, and the latter half of it, with the single year 1912-13, the increase is shown as follows:

* In the totals of Street Department (Public Works Department from 1911) expenditures are included those of the Street Laying-Out Department and, from 1908, those of the former Lamp Department.

	10-YEAR AVERAGE, 1902-11.	5-YEAR AVERAGE, 1907-11.	1912-13.
Debt requirements.....	\$4,525,887	\$5,017,540	\$5,272,850
Schools.....	3,937,453	4,284,336	5,119,857
Street Department *.....	3,563,097	3,941,227	4,698,777

* See footnote on previous page.

In the five-year period covered by this Special Publication (*i. e.*, 1908-12), ordinary receipts amounted to \$153,861,135, an increase of \$24,093,341, or 18.6 per cent. over similar receipts in the preceding five years (*i. e.*, 1903-07), while extraordinary receipts (*i. e.*, loans, etc.) in the five-year period 1908-12 amounted to \$26,548,350 against \$36,804,977 in the five years 1903-07, a decrease of \$10,256,627, or 27.9 per cent.

Taking the loans separately for these two five-year periods, their total 1908-12 was \$22,296,483, *i. e.*, \$10,249,517, or 31.5 per cent. less than in the earlier period, 1903-07.

Comparing the ordinary expenditures in the five-year period 1908-12, their total was \$151,715,071, an increase of \$22,776,551, or 17.7 per cent. over the same for the previous five years; while extraordinary expenditures decreased \$17,107,745, or 41.7 per cent. from the earlier period to the later.

The average annual ordinary expenditures for Debt Requirements, Schools and Street Department for the two five-year periods ending with 1912 and 1907 are as follows:

Average Annual Expenditures — Three Leading Objects.

FIVE-YEAR PERIOD.	DEBT REQUIREMENTS.	SCHOOLS.	* STREET DEPARTMENT.
1903-07.....	\$4,287,965	\$3,686,621	\$3,204,701
1908-12.....	5,098,874	4,496,606	† 4,199,514

* In the total of Street (now Public Works) Department expenditures are included those of the Street Laying-Out Department.

† Omitting the Lamp Division (added to Street Department in 1908), the average for the later five-year period is \$3,452,489, which is the proper amount to compare with the period 1903-07.

The foregoing comparison shows an increase in average yearly expenditures for Debt Requirements in the later five-year period of \$810,909, or 18.9 per cent.; for Schools, an increase of \$809,985, or 22 per cent.; and for Street Department \$994,813, or 31 per cent.

MONTHLY BULLETIN.

Volume XV., 1913.—Issued Quarterly with Statistics for Each Month.

In a brief survey of the twenty-two regular monthly tables for the year 1913, the following facts may be noted, viz., out of 14,780 cases of infectious diseases reported to the Board of Health during the year, the per cent. of deaths was 10.57 against 11.19 in 1912 (see p. 150).

The total number of permits issued by the Building Department in 1913 was 20,168, or 2,339 less than in 1912; for new buildings alone 1,689 (see p. 151).

The total number of "Immigrant Aliens" arrived in Boston from transatlantic ports during the year 1913 was 70,264, of which 52.8 per cent. reported their destination to be Massachusetts; said total being 45.1 per cent. more than in 1912. Immigrants from South Italy made up the largest percentage of the total, viz., 28.8, and next below this were the English, viz., 10.3 per cent. (see p. 158).

According to the records of the Fire Department there were 4,061 fires in the year 1913 (396 less than in 1912), of which 1,161 were not in buildings; only 39 buildings being totally destroyed and 258 others considerably damaged. The Boston Protective Department reported the total loss (insured) as \$1,098,607 on buildings, \$1,861,978 on contents and \$1,116,150 on vessels along the waterfront; loss not insured, \$177,788 (see p. 159).

The Public Library issued for home use in 1913 a total of 1,843,513 volumes; total volumes added during the year 17,569; total volumes belonging to library in December, 1913, 1,067,025 (see p. 162).

The real estate transfers in 1913 numbered 10,339 (733 less than in 1912), while the mortgages on real estate numbered 9,415 (934 less than in 1912), the aggregate value being \$63,427,616 (see p. 162).

The records of the Police Department show a total of 82,500 arrests in the calendar year 1913, against 75,697

in 1912; drunkenness the cause of 55,619 arrests, or 67.4 per cent. of total number; 39.1 per cent. of all persons arrested were not residents of Boston (see p. 163).

The maximum number of pupils attending the regular public day schools in 1913 was 107,429, as recorded on November 30 (2,692 more than the highest number in 1912), of which total 51.2 per cent. were boys and 48.8 per cent. girls (see p. 164).

The total of bank clearings or exchanges in 1913 as recorded by the Boston Clearing House was \$8,116,213,-999, *i. e.*, a decrease of \$801,933,708, or 9.46 per cent. from the 1912 total (see p. 166).

The total value of imports in calendar year 1913 was \$134,922,270, *i. e.*, a decrease of \$15,724,226, or 10.44 per cent. from 1912 total of imports; of exports, \$70,-919,087, *i. e.*, an increase of \$5,227,620, or 8 per cent. over 1912 exports; total foreign commerce in 1913, \$205,841,357, a decrease of \$10,496,606, or 4.8 per cent. from that of 1912 (see p. 167).

A new table (*i. e.*, XXI., on p. 170) shows some of the year's work of the Public Works Department in 1913, viz., 28,979,664,800 gallons of water supplied; 374,820 tons of ashes, etc., and 77,335 tons of garbage removed; 10,684 loads of road oil spread; 25,625 permits issued for use of streets; 6,041,837 passengers and 969,485 vehicles carried by the North and South Ferries, etc.

The Appendix articles in the four issues comprising the 1913 volume of the Bulletin occupy 40 pages, and a synopsis of them follows:

Bulletin Nos. 1, 2 and 3, Volume XV., March, 1913.

Comparative Statistics of New England, Massachusetts and Boston — 1. The Relation of New England to the United States — Third Article.

This six-page article is made up of tables covering the manufactures of boots and shoes, including cut stock and findings, also leather, in the year 1909, with changes since 1899; of shipbuilding in the same year, and various bank, clearing-house and foreign commerce statistics for 1911 and 1912, with increase or decrease of business during the preceding ten years. With the figures for the United States and for New England are shown those for each New England state. In the boot and shoe industry the total value of the product in

New England for 1909 was \$293,092,000, or 57.2 per cent. of that of all such manufactures in the United States, the per cent. of New England's increase in the ten years since 1899 being 63.5. Of this New England product the proportion of Massachusetts was 80.6 per cent. In the shipbuilding industry the product of New England in 1909 was \$11,634,192 in value, out of a total of \$73,360,315 in the United States, that of Massachusetts alone being valued at \$6,995,847.

The number of national banks in New England in 1911 was 466, with total assets of \$848,448,000, out of a total number in the United States of 7,277, with assets of \$10,379,439,000. Of savings banks, the number in New England was 421, with total resources of \$1,473,175,000, out of a total number in the United States of 1,884, with resources of \$3,762,402,000. The number of loan and trust companies in New England was 172, with total assets of \$581,699,000, out of a total number in the United States of 1,251, with assets amounting to \$4,665,111,000. Of all the assets and resources belonging to these New England banks, the proportion of Massachusetts banks alone was 59.8 per cent.; of all included in the banks of the United States, the proportion of those in New England was 15.4 per cent., and of those in Massachusetts alone, 9.2 per cent.

The total clearing-house exchanges in New England for the year ending Sept. 30, 1912, were \$10,251,821,000, or 6.1 per cent. of the total for the United States. Of this total for New England, the proportion of Massachusetts was 90.7 per cent. and of Boston alone, 86.5 per cent.

The three pages of foreign commerce tables show the imports and exports of New England, Massachusetts and Boston, also the other New England ports, as compared with totals for the United States, in the years 1903, 1907 and 1912, and the average value of the same for the port of Boston alone by five-year and ten-year periods, 1890 to 1912. The foreign commerce of New England amounted to \$230,236,973 in 1903, \$282,582,068 in 1907, \$266,497,676 in 1912, the proportion belonging to Boston alone being 75.8 per cent. in 1903, 79.7 per cent. in 1907 and 74.7 per cent. in 1912. Taking Boston's imports and exports separately from 1890 to 1912,

the maximum value of imports was reached in 1912, viz., \$129,293,016, and of exports the highest five-year average was \$107,256,061 in the years 1900 to 1904. The highest five-year average of Boston's imports and exports combined amounted in value to 9.87 per cent. of the average foreign commerce of the United States in the period 1895 to 1899. In 1903 the New England state ranking next to Massachusetts in value of foreign commerce was Maine, but in 1907 and 1912 Vermont ranked second.

Bulletin Nos. 4, 5 and 6, Volume XV., June, 1913.

A. *Population, Valuation, Tax Rate and Funded Debt, also other Taxation Statistics, for the Cities of Massachusetts in 1912.*

B. *Statistics of New England, Massachusetts and Boston.—1. The Relation of New England to the United States — Fourth Article.*

C. *Receipts of Milk in Boston by Rail, 1912, by Months.*

D. *Rank of 21 Cities, 1909, in Industries Wherein New England Leads.*

(A.) This four-page article adds the statistics of 1912 to our series of yearly comparative exhibits of the financial condition of the thirty-three cities in the State.

As to "Tax Rate," the rank of Boston in 1912 was fifth from the lowest out of twenty-six different rates, or \$16.40, the same as in 1911 and 1910. The lowest rate was in Beverly (*i. e.*, \$15.00) and the highest in Chicopee (*i. e.*, \$23.00).

The full record shows a reduction of tax rates in eleven cities averaging 64 cents, an increase in fifteen cities averaging 79 cents, and no change in seven cities.

As to "Per Cent. of Net Debt to Valuation," Boston's ranked eleventh from the highest, or 5.00, Chelsea showing the highest percentage, or 6.66, and Waltham the lowest, or 1.64.

As to "Assessed Valuation," the total for Boston in 1912 was \$1,481,822,917, only 19.9 per cent. of which applied to personalty. This total valuation, which included that of the newly annexed Hyde Park district (*viz.*, \$16,343,500), was larger by \$53,430,203 than

that of 1911. It amounted to 47.6 per cent. of the valuation of all the cities.

As to "Net Debt," that of Boston was \$74,062,399, or \$2,399,633 more than in 1911. Under "Net Debt per Capita," the item for Boston in 1912 was \$104.67, computed according to the estimated population of 711,299. The city ranking next to this was Newton, with a "per capita" of \$78.68, while the average for all the cities was \$60.34. Boston's "Assessed Valuation per Capita" was \$2,083 in 1912.

Of the "Whole Number of Persons Assessed" in Boston (*i. e.*, 253,417), those liable only for poll tax constituted 71.35 per cent., while the number of "Resident Individuals Assessed on Property" was 47,789, or 65.8 per cent. of all persons so assessed. The "Per Cent. of Resident Individuals Assessed (on Property) to Population" was 6.72 in Boston, 5.20 in Holyoke, 5.47 in Lawrence, 5.76 in Fall River, 6.50 in Chelsea. None of the 28 other cities showed as low a percentage as Boston's. The city showing the highest percentage was Newton, *viz.*, 16.81.

Boston and Springfield are the only cities in the State with a total land valuation in excess of that on buildings. The figures for Boston in 1912 were \$701,666,400 on land and \$484,809,000 on buildings. Its total real estate valuation in 1912 amounted to 34.9 per cent. of the State's total, while its population was but 20.4 per cent. Boston's total of male polls assessed in 1912 was 202,659, or 21 per cent. of the State's total.

(B.) Commercial, industrial and educational statistics for the years 1903, 1907, 1909, 1910 and 1912 occupy nine pages and more of tables in this fourth article on New England, Massachusetts and Boston and their relation to the United States. The duties on imports collected in New England during the fiscal year ending June 30, 1912, amounted to \$27,670,636, or 9.1 per cent. of the total for United States, and those collected in Boston alone were 83.9 per cent. of the total for New England. The tonnage in the foreign commerce, steam and sail, of vessels entered at the 30 New England ports in the same year was 3,978,279, and of vessels cleared 2,881,121, making a total of 6,859,400 net tons, of which 70.3 per cent. was credited to Boston alone. As compared with the year 1907, the tonnage at Boston in 1912 showed a decrease of 8.4 per cent.

In products of the fisheries New England's were valued at \$15,085,350 in 1908, or 27.9 per cent. of the total for the United States.

As to cotton manufactures, their value in New England in 1909 (*i. e.*, \$316,541,000) was a little more than half (*i. e.*, 50.4 per cent.) of all such goods produced in the United States, and the product value in Massachusetts alone was 58.9 per cent. of that of New England. In woolen manufactures New England's product value (*i. e.*, \$275,648,000) in 1909 shows a considerably higher percentage (*i. e.*, 63.2) of the United States than that reached by the cotton manufactures, and Massachusetts alone shows 51.5 per cent. of the total woolen product value of New England.

The total mileage of public roads in New England in 1909 was 87,037, or 3.96 per cent. of all such in the United States. The percentage of all roads improved was 22.2 in New England and 8.7 in United States. Of railroads the total mileage in New England was 7,925 in 1911, or 3.3 per cent. of total in United States, and Massachusetts had 26.31 miles of line to each hundred square miles of territory, which is more than any other New England state showed and over three times as many as the United States showed.

The number of pupils enrolled in the public elementary and high schools of New England in the school year 1910-11 was 1,091,644, or 6.05 per cent. of all such in the United States. Of said number, the proportion of Massachusetts alone was 49.36 per cent. The number of teachers employed in the New England schools was 37,598, of which 9 per cent. only were men. Of this number, 15,979 teachers were in Massachusetts schools. The average monthly salary of men teachers in New England was \$107.23, in Massachusetts \$152.96, in United States \$73.86; of women teachers, \$48.39 in New England, \$61.82 in Massachusetts, \$54.98 in United States. The school expenditure per pupil attending, for the school year 1910-11, was \$50.39 in Massachusetts, as compared with the next in rank, *i. e.*, \$37.45 in Rhode Island and \$34.71 in United States. The number of students in the colleges and technological schools of New England in 1910-11 was 25,759, or 11.59 per cent. of all such students in the United States. Of the said number, 63.5 per cent. were in Massachusetts. The professors and instructors numbered 3,167 in New

England, of which 2,176 were in Massachusetts. Of the productive funds owned by all of the colleges, etc., in the United States, one-fourth, or \$74,654,450, belonged to those of New England and 61 per cent. of said total to those of Massachusetts. Of the total income for endowment of colleges in the United States in 1910-11, the amount given to those in New England was 30 per cent., or \$4,112,449, and 56.7 per cent. of this was for Massachusetts colleges.

(C.) The number of quarts of milk received in Boston by rail during the calendar year 1912 are shown, by months and quarters, in this table compiled from monthly returns furnished by the Massachusetts Railroad Commissioners. The Boston and Maine Railroad brought in a total of 74,957,502 quarts, the New York, New Haven & Hartford 18,845,117 quarts, and the Boston and Albany 10,885,289 quarts, making an aggregate of 104,687,908 quarts during the year, or 12,892,855 more than in the year 1911.

(D.) The rank of 13 New England and 8 other cities in certain lines of manufactures for the year 1909 is shown in this short table, with special reference to those in which New England cities lead. Lawrence, Mass., ranks first in the woolen goods industry, its proportion being 13.4 per cent. of the total output, etc., in the United States. Lynn, Mass., ranks first and Brockton second in the manufacture of boots and shoes, with 9.1 per cent. and 7.7 per cent. respectively to total produced in United States. Fall River stands first, New Bedford second and Lowell third in the cotton goods industry, with 7.7 per cent., 6.8 per cent. and 3.9 per cent. respectively of total output in United States. In ten other items of rank, New England cities stand fourth, fifth or sixth.

Bulletin Nos. 7, 8 and 9, Volume XV., September, 1913.

A. Boston School Census, 1913.

B. Banks and Banking, Industries, Wealth, Etc., in New England and Boston.

(A.) From this two-page article on the School Census of 1913 it appears that the "school population" (*i. e.*, children from 5 years of age to 14 years inclusive) numbered 127,025, or 1,847 more than in 1912. In the public schools there was an increase of 2,770; in

the private schools a decrease of 63, and in those not attending any school a decrease of 860, since 1912. In the five years, 1908-12, the average annual number in the public schools constituted 74.44 per cent. of the total "school population"; the number in private schools 16.19 per cent.; and not attending any school 9.37 per cent. The number of the school population 5 and 6 years of age was 26,603; 7 to 13 years, 88,152; and 14 years, 12,270. The total number of boys was 63,691; of girls, 63,334. In public schools there were 92,664; in private schools, 20,743; not attending any school, 13,618.

(B.) This 12-page article was compiled from the reports of the Thirteenth Census (1910) published by the U. S. Bureau of the Census, and from the report of the U. S. Comptroller of the Currency for the year 1912. The United States is divided into nine geographical divisions, the six New England states constituting Division 1, and these divisions are compared in respect to area, population, wealth, agriculture, manufactures, etc. Banking statistics are the most prominent feature in this article. In banking power, total bank resources and clearing-house exchanges New England ranked fourth in 1912, while seventh in population and ninth in area, but second in population per square mile, in cities of 10,000 per square mile and in foreign-born persons per square mile, as derived from the census of 1910. New England ranked third in value of manufactures and in number of wage earners in 1909, and fourth in total wealth possessed, the last special report on the latter being in 1904. Banks of all kinds numbered 25,160 in the United States in 1912, of which 1,083 were in New England. The resources of all banks amounted to \$24,910,743,171, of which those in New England held 12.35 per cent. Among the largest cities of the country, Boston ranked first in banking power per capita and third in total bank clearings. Boston's clearings amounted to 86.5 per cent of the total in New England. The banking power of the national banks in Boston amounted to \$271,424,000 on June 14, 1912. This total consists of the capital, surplus, undivided profits, deposits and circulation of all the banks.

Bulletin Nos. 10, 11 and 12, Volume XV., December, 1913.

A. Summary of Deaths in the Year 1913, by Causes and by Sex, also Comparisons with Mortality Statistics of 1912.

B. Summaries, by Sex, of Persons Aided by Boston Institutions in the Year 1913.

C. Apportionment of Members of the Legislature, 1857-1906.

(A.) The mortality table for 1913, by 14 groups of diseases and 189 different causes, shows the total number of deaths in the year, by sex, viz., 6,327 males and 5,510 females, or 11,837 in all. This is 194 more than the total for 1912. Deducting the deaths of non-residents (*i. e.*, 1,540) the death rate is 14.16 for the year, computed according to a population estimate of 726,975 on July 1. This is much nearer the correct rate than that which results from including indiscriminately all the deaths that occurred in the City, of which 43 per cent. were in the many hospitals and other institutions, where numerous non-residents resort for treatment and care. The largest number of deaths were from diseases of the heart (*i. e.*, 1,704); next, those from pneumonia (*i. e.*, 1,452); third, those from tuberculosis (*i. e.*, 1,064). The total from these three principal causes (*i. e.*, 4,220) was 98 more than from the same causes in 1912.

The number of violent deaths in 1913 was 872, of which 103 were suicides and 36 homicides.

(B.) The patients cared for in the City Hospital and its branches numbered 17,644 in 1913; in Consumptives' Hospital (exclusive of Out-Patient Department), 1,160; dependents in Children's Institutions, 2,249; in Infirmaries, Wayfarers' Lodge, etc., 32,570; soldiers and sailors, or families of, 2,230; prisoners in House of Correction and Suffolk Jail, 16,873; total for these institutions, 72,726, or 1,589 more than in 1912.

This total does not include the number of persons (*i. e.*, about 8,400) in families aided in their homes by the Overseers of the Poor, nor the beneficiaries of the new Mothers' Aid Law (*i. e.*, about 500).

(C.) This four-page article consists of a review of the changes in the apportionment of State senators,

councillors and representatives during the fifty years ending with 1906. On the basis of the number of legal voters found by the State census in 1857, 1865 and every tenth year thereafter, 240 representatives were and are apportioned by the Legislature to the several counties of the State. The number of such voters in Suffolk County increased from 24,745 in 1857, entitling it then to 28 representatives, to 152,196 in 1906, entitling it to 54 representatives, 50 of which represent Boston and the others Chelsea, Revere and Winthrop. The apportionment of senators in the State was and still is 40 and of councillors 8. Suffolk County had five senators in 1857, or 12.5 per cent. of the State, and nine senators in 1906, or 22.5 per cent. of the State. The next decennial division of the State into representative and other political districts will be made by the Legislature in 1916, based upon the number of legal voters found by the State census enumeration in 1915. Tables showing the number of legal voters in Boston, by wards, in 1875, 1885, 1895 and 1905, with changes in each decade, are included in this article.

THE MUNICIPAL REGISTER FOR 1913.

This department, by vote of the City Council on March 3, 1913, was authorized to prepare and have printed, under the direction of the Committee on Rules, the Municipal Register for 1913. A document edition bound in heavy cardboard was published, as heretofore, in addition to the regular cloth-bound edition. Among the improvements this year are a new two-page table showing the annual "Appropriations from Taxes and General Revenue, 1907-12," with the increase or decrease from 1907, each department being separately shown, also the County appropriations, the payments to the State and the total of special appropriations for public improvements from the tax levy. Four pages of "Additions and Corrections" provide later information than it was possible to include in the regular compilation of the book. This issue contains 336 pages, including an index of nine pages, also a ward map of the City.

OTHER WORK.

Information on various subjects has been furnished from time to time to the Mayor, City Council and to

the public, 16 pages of the latest statistics of Boston having been specially compiled for the 1913 edition of "Organization of the City Government."

The distribution of this department's publications and the annual volumes containing all the department reports among municipal and college libraries, citizens and the executive officials of other cities, and the obtaining of municipal and governmental publications in return, continued to receive careful attention, but our library space is much below the needs of the department.

During the year 614 persons or institutions have received our publications regularly (exclusive of their distribution among the City departments) and our exchange of documents with foreign municipal departments and statistical bureaus has been continued under the special arrangement with the Smithsonian Institution in Washington.

Respectfully submitted,

F. SPENCER BALDWIN, *Chairman.*

WILLIAM D. C. CURTIS.

JOHN D. WORCESTER.

FREDERICK W. RUGG.

WILLIAM D. MCKISSICK.

APPENDIX.

STATISTICS DEPARTMENT.

STATEMENT OF EXPENDITURES, 1913-14.

Appropriation	\$10,500 00
Unexpended	639 80
Total Expended	<u>\$9,860 20</u>

Expenditures.

1. Secretary	\$3,000 00
2. Clerk hire	3,394 12
3. Printing	3,250 02
4. Supplies and stationery	31 95
5. Telephone	32 40
6. Expressage and delivering publications	46 96
7. Postage	58 00
8. Books and periodicals	28 75
9. Justice of the Peace, fees for attesting pay rolls, etc.	18 00
	<u>\$9,860 20</u>

INVENTORY OF BOOKS AND PERIODICALS.

	Bound Volumes.	Unbound.	Total.
General Library.....	152	827	979
Periodicals.....	2	334	336
City Documents (Boston).....	725	1,330	2,055
State Documents (Massachusetts).....	373	515	888
Other State Documents.....	38	47	85
United States Documents.....	214	881	1,095
Cities (United States).....	945	1,065	2,010
" (Great Britain).....	172	250	422
" (Germany).....	83	549	632
" (France).....	18	394	412
" (All other).....	88	668	756
Totals.....	2,810	6,860	9,670

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